

Annual Groundwater and Drinking Water Program Review



Calendar Year 2019

Illinois Environmental Protection Agency



Annual Groundwater and Drinking Water Program Review Calendar Year 2019

Illinois Environmental Protection Agency Bureau of Water Division of Public Water Supplies

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Acronyms and Abbreviations

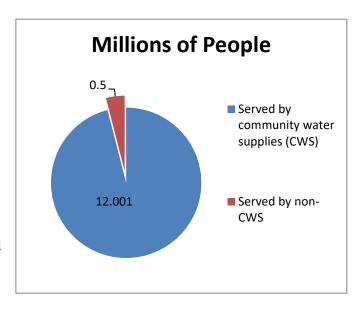
| Act | Illinois Environmental Protection Act | | | |
|----------------|---|--|--|--|
| BOW | Bureau of Water | | | |
| CAS | Compliance Assurance Section | | | |
| CCA | Compliance Commitment Agreement | | | |
| CCCDI | Cross-Connection Control Device Inspector | | | |
| CWS | Community Water Supply | | | |
| DoIT | Department of Innovation and Technology | | | |
| DPH | Department of Public Health | | | |
| DPWS | Division of Public Water Supplies | | | |
| EDG | Enforcement Decision Group | | | |
| EPA | Environmental Protection Agency | | | |
| FOS | Field Operations Section | | | |
| GAC | Groundwater Advisory Council | | | |
| GWS | Groundwater Section | | | |
| HAB | Harmful Algal Bloom | | | |
| ICCG | Interagency Coordinating Committee on Groundwater | | | |
| IFAS | Infrastructure and Financial Assistance Section | | | |
| IGPA | Illinois Groundwater Protection Act | | | |
| ILCS | Illinois Compiled Statutes | | | |
| Ill. Adm. Code | Illinois Administrative Code | | | |
| IPCB | Illinois Pollution Control Board | | | |
| JCAR | Joint Committee on Administrative Rules | | | |
| LHD | Local Health Department | | | |
| LSLR | Lead Service Line Replacement | | | |
| MCL | Maximum Contaminant Level | | | |
| M&R | Monitoring and Reporting | | | |
| MRDL | Maximum Residual Disinfectant Levels | | | |
| NCA | Non-Compliance Advisory | | | |
| NCPWS | Non-Community Public Water Supply | | | |
| NPDWR | National Primary Drinking Water Regulations | | | |
| NTNC | Non-Transient, Non-Community | | | |
| OECA | Office of Enforcement and Compliance | | | |
| PS | Permit Section | | | |
| PWS | Public Water Supply or System | | | |
| PWSS | Public Water System Supervision | | | |
| RO | Regional Office | | | |
| ROINC | Responsible Operators in Charge | | | |
| RTC | Returned to Compliance | | | |

| RTCR | Revised Total Coliform Rule |
|-------|---|
| SDWA | Safe Drinking Water Act |
| SDWIS | Safe Drinking Water Information System |
| TNC | Transient Non-Community |
| UCMR | Unregulated Contaminant Monitoring Regulation |
| VN | Violation Notice |

Executive Summary

This report provides information on the efficacy of existing programs to protect and support public water purveyors and groundwater resources in Illinois. This document is intended to identify program stresses and future directions in overcoming existing insufficiencies. Further, this report attempts to provide information on anticipated future resource needs in the regulatory oversight and technical assistance to drinking water systems in Illinois. Current vacancies are emboldened in the organizational tables. Finally, this is intended to meet the reporting requirements of the Safe Drinking Water Act (SDWA) Amendments of 1996 and the Illinois Groundwater Protection Act (IGPA) adopted in 1987.

The Illinois Environmental Protection Agency (EPA) regulates 1,756 community water supplies (e.g., municipalities, privately owned utilities, etc.) that serve 12,031,118 individuals. The Illinois Department of Public Health (DPH) regulates 3,692 non-community water supplies (e.g., schools, factories, campgrounds, rest areas, etc.) that serve approximately 486,901 customers. The mission of these two state agencies is to assure that all persons served by public water supplies receive water that is safe and adequate in quantity.



The Illinois EPA, Illinois DPH, and United

States Environmental Protection Agency (U.S. EPA) recognize the importance of an ongoing program to evaluate the sanitary conditions of all public water supplies in Illinois. For the 2017-2019 calendar year timeframe, the Illinois EPA conducted sanitary surveys at approximately **80.5** percent of the community water supplies (CWS) and the Illinois DPH conducted sanitary surveys at approximately **96.3** percent of the non-community public water supplies (NCPWS) in the state. Similarly, the Agencies understand the importance of an ongoing program to protect ground and surface water sources of public water supplies. In calendar year 2019, **73** percent of the population served by community water systems in Illinois had source water that was substantially protected by their respective water systems, exceeding the U.S. EPA established measure for source water protection programs.

The Governor and General Assembly further understand the importance of well credentialed and properly certified public water supply operators in protecting water consumers. For Calendar Year 2019, there were **3,621** certified community water supply operators (not including **335** operators in training) and **562** certified non-transient non-community water supply (day care centers, schools and factories) operators in Illinois. Expansion of the State's technical capacity (such as the operator in training certification process and revisions to the Public Water Supply Operations Act) remains one of the hallmarks of the drinking water protection program. Further, the Illinois EPA and DPH continue to support the development of financial and managerial capacity in

water systems. We continue to look for opportunities to enhance these important elements in the stability of water supplies. Such initiatives as the capacity development technical assistance contractual agreement will be given priority to ensure the continued viability of our water systems. Recognizing the *mission* of the Illinois EPA and DPH, for calendar year 2019, **99** percent of the population served by public water supplies in Illinois received drinking water that met all applicable health-based drinking water standards.

<u>Core Public Water Supply Supervision (PWSS) Program Activities</u> In 2019, the Illinois EPA and DPH agreed to:

Federal funds provided by the PWSS program currently provide less than 64.5 percent of the funds used to support the drinking water protection program in Illinois. The remainder of staff resources are provided for by state funding sources.

Rules and primacy - Illinois continued to maintain primacy for, and implement all of the drinking water rules contained in **Appendix G**. These rules continued to be administered by the Illinois EPA and DPH.

• Illinois requested and was granted a 2-year extension, to February 2017, to submit the Revised Total Coliform Rule (RTCR) primacy application. The

Illinois DPH draft State Specific RTCR rule has been through First Notice Publication and Illinois DPH Legal Section is preparing a submission to the Joint Committee on Administrative Rules (JCAR) for 2nd Notice Publication and Adoption before the end of 2020.

- Illinois has completed programming to be able to fully report RTCR violations, including Level 1 and 2 assessment information, to SDWIS/STATE. Non-CWS implementation of RTCR is on course to fully report on this Rule in 2020 if programming allows.
- U.S. EPA Region 5 continued to track state reporting of rule violations.

Sanitary surveys - Illinois continued to maintain a baseline core of individuals with the technical expertise needed to perform sanitary surveys. (See page 11 CWS and page 12 NCPWS)

- Illinois ensures that sanitary surveys are conducted periodically that, at a minimum, meet frequency requirements specified by rule.
- U.S. EPA Region 5 tracks state commitments to conduct sanitary surveys within the federally required intervals.

Laboratory certification - Illinois continued to provide an adequate laboratory certification program for all regulated contaminants, at a minimum, to certify commercial laboratories within the State. An on-site audit of Illinois EPA's laboratory was conducted on September 10-14, 2018 and a draft audit report was sent to the state on March 17, 2019. Illinois EPA submitted responses to the draft report on May 9, 2019. Interim Certification was granted on August 28, 2019 which is effective until a final certification decision is issued and is contingent upon the laboratory's continued demonstration of acceptable performance through the analysis of annual proficiency testing samples.

The DPH's Lab audit visit occurred from September 10-13, 2018 and full certification was granted for microbiological analytes and methods on June 20, 2019. Following full

certification, IDPH requested certification for an additional method. Interim Certification was granted on August 28, 2019.

- Illinois continues to certify all laboratories that produce results for compliance with SDWA at least once every three years and will meet all regulatory requirements.
- Illinois EPA's Division of Laboratories maintains a certification program and a certified State Lab for inorganic and organic contaminants of concern.
- Illinois DPH maintains a certification program and a certified State Lab for bacteriologic contaminants of concern.
- Illinois EPA and DPH submit annual questionnaires to U.S. EPA Region 5.
- U.S. EPA Region 5 tracks state commitments to conduct laboratory certification activities by the Illinois DPH and the Illinois EPA's Division of Laboratories.

Compliance and enforcement management - Illinois EPA and DPH maintain an adequate enforcement and compliance assistance program. Illinois and U.S. EPA Region 5 continue to implement data exchange to ensure that enforcement resources are targeted at the non-compliant PWSs. (See page 18-21 and Appendix B and D CWS and page 21 -26 and Appendix C NCPWS)

- Illinois (EPA & DPH) continue to address all systems not in compliance with state rule and regulation. Specifically, Illinois will address non-compliant PWSs that have a score of 11 or higher on the U.S. EPA's Enforcement Targeting Tool report.
- As an enforcement option, Illinois continues to refer noncompliant PWSs to the U.S. EPA Region 5 for follow-up action.
- Illinois EPA and DPH continue to keep records relating to enforcement decisions.
- Illinois EPA and DPH continue to produce an annual compliance report by July 1 as part of a consolidated report program efficacy.
- U.S. EPA Region 5 tracked state commitments under measure SDWA02 (involving addressing with a formal enforcement action or return to compliance), the number of priority systems equal to the number of its PWSs that have a score of 11 or higher on the July Enforcement Targeting Tool report, and update Illinois quarterly.
- Illinois EPA and DPH worked with U.S. EPA on the National Compliance Initiative (NCI).

Data management and reporting - Illinois EPA and DPH maintain adequate data management systems (and updates it for new rules, and new versions of FedRep) that tracks requirements for all rules, which includes the appropriate combination of hardware, software, and personnel to accurately and within a reasonable timeframe identify the inventories (including routine updates of system information), maintain water quality monitoring information, and track compliance with all M/R, MCL, MRDL, TT, PN, and public information requirements.

- Illinois EPA and DPH continue to report to U.S. EPA actions and sample data quarterly and inventory data at least annually in accordance with 40 CFR 142.15.
- Illinois EPA and DPH utilizes SDWIS/STATE to manage water system compliance with all regulatory compliance concerns.
- As noted previously, Illinois EPA has not yet completed programming to be able to fully report RTCR violations, including Level 1 and Level 2 assessment information, to SDWIS/STATE. Non-CWS implementation of RTCR is on course to fully report on this

Rule in 2020 if programming allows. Illinois EPA and DPH both rely on the Department of Innovation and Technology (DoIT) to complete this programming to SDWIS. An exact completion date is not available.

• U.S. EPA Region 5 tracked quarterly and annual data reporting requirements.

Operator certification - Illinois continued to maintain regulations for the operation and maintenance of all public water systems by properly certified individuals. (See page 23-31 CWS and page 30-33 NCPWS)

- Illinois continues to report to U.S. EPA the status of the operator certification program on an annual basis.
- U.S. EPA Region 5 tracks completion of this report to avoid a 20 percent withholding of the Illinois Drinking Water Revolving Loan Fund grant should Illinois fail to meet this commitment.
 - During FFY19, the U.S. EPA Region 5 staff evaluated Illinois Operator Certification Programs based upon established baseline standards.

Capacity development - Illinois continued to work with existing PWSs and required capacity demonstrations for new PWSs to enhance water system technical, managerial, and financial capacity to operate in compliance with federal and state regulations. (See page 34-38 CWS/NCWS and Appendices E CWS and F NCWS)

- Illinois EPA and DPH continued to report to U.S. EPA the status of the Illinois Capacity Development Program on an annual basis.
- U.S. EPA Region 5 tracks completion of this report to avoid a 20 percent withholding of the Illinois Drinking Water Revolving Loan Fund grant should Illinois fail to meet this commitment.
 - The U.S. EPA Region 5 staff will continue to work with Illinois to promote proactive efforts that will build water system capacity.

Source water assessments and protection - Illinois continued to report the number of CWSs with source water protection (SWP) plans and the number of CWSs implementing SWP measures electronically via SDWIS/STATE. (See Page 39)

- Illinois continued to update source water assessments, as resources allow, and completed source water assessment reports for new public water systems.
- U.S. EPA Region 5 continued to track the Source Water Assessment and Protection Program through SDWIS and other State and Federal Reports.

Measures and Indicators - Illinois continued to use quantitative measures developed by U.S. EPA Region 5 to regularly assess program performance. (**See Appendix H**)

- Illinois continued to participate in semi-annual conference calls with U.S. EPA Region 5 to discuss national program measures, Region 5 specific shared goals and special high priority queries.
- Illinois continued to provide information regarding lead action level exceedances upon request from U.S. EPA Region 5.
- U.S. EPA Region 5 continued to track the status of the Illinois Drinking water program with respect to national program measures, Region 5 specific shared goals and special high priority queries.

- Public health concerns related to Lead and Copper Rule (LCR) implementation will remain a high priority area of focus.
- The U.S. EPA Region 5 completed a data and enforcement verification audit report in Calendar Year 2018.
 - o Illinois worked to develop corrective action plans regarding identified items within the Report.

America's Water Infrastructure Act of 2018 (AWIA)

AWIA was adopted by Congress in October of 2018 and is intended to improve drinking water and water quality, deepen infrastructure investment, enhance public health and quality of life, increase jobs, and bolster the economy. The AWIA provisions are the most far-reaching changes to the Safe Drinking Water Act since the 1996 Amendments, with over 30 mandated programs. The following summarizes the major elements of AWIA.

- **Drinking Water State Revolving Fund (DWSRF)** AWIA authorizes the DWSRF to allow extended infrastructure loan terms, requires the provision of additional subsidy to state-defined disadvantaged communities, and expands source water protection-related eligibilities under the Local Assistance set-aside.
- Community Water System Risk and Resilience Assessments AWIA requires community water systems serving more than 3,300 people to develop or update risk assessments and emergency response plans (ERPs). The law specifies the components that the risk assessments and ERPs must address and establishes deadlines by which water systems must certify to EPA completion of the risk assessment and ERP.
- Amendments to the Emergency Planning and Community Right-to-Know Act AWIA requires state and tribal emergency response commissions to notify the applicable State agency (i.e., the drinking water primacy agency) of any reportable releases and provide community water systems with hazardous chemical inventory data. This guide provides information for community water systems and state drinking water primacy agencies.
- Water Infrastructure Improvements for the Nation (WIIN) Act Grant Programs AWIA provides funding to assist public water systems in small and disadvantaged
 communities with reducing lead in drinking water systems, provides financial assistance
 to homeowners for lead line replacement and testing drinking water in schools and
 childcare facilities for lead.
- Asset Management and Capacity Development Strategies States are required to amend their state capacity development strategies to include a description of how the state will encourage the development of asset management plans that include best practices, training, technical assistance and other activities to help with implementation of those plans. States also must include an update of these activities to encourage asset management practices in the Governor's report. EPA must review and update, if appropriate, asset management documents and trainings every five years.

Priorities for 2020

The following activities outline the priorities for the Illinois EPA and DPH for Calendar Year 2020:

- Implement Corrective Action Plan to address the 2017 U.S. EPA Joint File Review and Enforcement Verification:
 - Add two full time equivalent to the Illinois DPH to implement the non-community water supply program;
 - o Adding an additional engineer to the Illinois EPA Elgin Regional Office to implement sanitary surveys; and
 - Two engineers hired for the Illinois EPA Regional Offices in Champaign and Springfield to assist with conducting sanitary surveys.
- Focus on implementing the newly adopted rules for CWS permitting (Part 602) and for design, operation and maintenance of CWS (Part 604). This effort to streamline the PWS regulations will be beneficial for both the Illinois EPA and regulated community- easy to understand and implement:
 - o Amends permitting rules in 35 Ill. Adm. Code 602:
 - Adds details for what is required in a permit application for the construction of wells or surface water intakes;
 - Adds details on what is required for stability and corrosion control (corrosive water can cause leaching from lead pipes; and
 - Changed how a CWS demonstrates satisfactory disinfection to obtain an operating permit. Currently, the membrane filter technique or presumptive test, fermentation tube method was required to show no bacterial growth. New rules allow presence/absence test for coliform bacteria.
 - Creates an operating permit by rule for water main projects or projects not requiring disinfection. Must submit a certification and evidence of disinfection (where required), and after submitting the certification may begin operating immediately.
 - o Creates a new 35 Ill. Adm. Code 604—Highlights:
 - Requires CWS without a free chlorine residual (systems with ammonia in their source water or that add ammonia to create chloramines) must to create a nitrification action plan. The plan would set forth monitoring and system specific levels of the chemical when corrective action must be taken. This rule was based on what is being done in Texas.
 - Requires CWS to develop a source water protection plan and submit that plan to the Illinois EPA for review and approval.
 - Increases distribution system chlorine residuals for free chlorine from 0.2 to 0.5 mg/l and for combined from 0.5 to 1.0 mg/l. Illinois EPA believes that this increase is necessary for the protection of public health simply because the strong disinfectant residuals are more effective in the control of bacteria in the distribution system.
- Illinois EPA will be investing resources in developing programs that address failing drinking water systems, workforce development, and asset management.

- Per and Polyfluoroalkyl Substances (PFAS): Illinois EPA is working on a PFAS strategy. One of the first steps in Illinois EPA's draft PFAS strategy is to determine the prevalence of 18 PFAS contaminants all community water supplies. This statewide sampling effort will start in 2020 and will take a year or so to finish:
 - o Additionally, the Illinois EPA PFAS strategy includes:
 - Developing a comprehensive web site for PFAS;
 - A response strategy for community water supplies where PFOA and PFOA exceed levels of concern to develop public notification and treatment if necessary; and
 - Proposing groundwater quality standard for PFOS, PFOA, perfluorohexane sulfonic acid ("PFHxS") and perfluorononanoic acid ("PFNA"), and Perfluorobutane Sulfonic Acid ("PFBS") to 35 Ill. Adm. Code 620. Outreach is being conducted and Illinois EPA is planning to file the rulemaking proposal with the Board in 2020.
- Working with U.S. EPA to finalize the streamlining of IPCB drinking water regulations 35 Ill. Adm. Code 611 (Part 611) to enhance drinking water protection in Illinois and file the rule making with the Board.
- Continue to support statutorily established committees, councils and boards charged with assisting the Illinois EPA and DPH in improving program activities in support of the Agencies' mission.
- Continue to use, support and improve technology, such as SDWIS/STATE, to track the efficacy of water treatment facilities in protecting water consumers.
- Continue to initiate efforts to enhance the technical, financial and managerial capacity of
 public water supplies. This priority includes ensuring that the Permitting, Operator
 Certification, Cross-Connection Control and Source Water Protection Programs remain
 high priorities in protecting public health and ensuring water system viability.
 Additionally, the Illinois EPA will continue to support a contractual agreement to work
 with community water supplies on capacity development.
- Place added priority on increasing the number of inspections to achieve goals and provide emergency and technical assistance to water systems as necessary to maintain Illinois' high public health protection goals.
- Continue to conduct the prevention-oriented programs to protect groundwater required by the Illinois Groundwater and Environmental Protection Acts and recommended by the Interagency Coordinating Committee on Groundwater, Groundwater Advisory Council, and the Priority Groundwater Protection Planning Committees.
- Continue to support protection of the Mahomet Aquifer including, publishing the real-time groundwater monitoring project in Mason County.
- Continue to support various Bureau/Illinois EPA groundwater related compliance investigations including, but not limited to, assisting in the enforcement process; preparation of compliance commitment agreements; providing testimony and assisting in the development of consent decrees or agreed upon orders by the court.

PURPOSE OF THIS REPORT

The Illinois EPA and Illinois DPH hope that by making this document available for review the public will have a better understanding of drinking water quality concerns in Illinois.

Furthermore, this document is intended to meet several independent reporting requirements of the Safe Drinking Water Act (SDWA) Amendments of 1996, serve as the annual self-assessment for the Public Water System Supervision (PWSS) Grant (which should aid the U.S. EPA Region 5 in oversight of Illinois' primacy programs), as well as reporting requirements of the Illinois Environmental Protection Act (Act).

First, Section 1414(c)(3) of the SDWA requires States with primary enforcement authority to prepare, make readily available to the public, and submit to the Administrator of the U.S. EPA by July 1 of each year, an annual report on violations of national primary drinking water regulations by public water systems.

Second, this report is intended to meet the Capacity Development Program reporting requirements of Section 1420 of the SDWA. The SDWA requires annual documentation to the U.S. EPA and triennial reporting to the Governor on the efficacy of Illinois' program with emphasis on improving technical, managerial and financial capacity of public water systems in Illinois.

Third, States are required to adopt and implement an Operator Certification Program for public water supplies. The Guidelines pursuant to Section 1419(b) of the SDWA require the Illinois EPA to provide information to U.S. EPA annually for program review.

Fourth, Section 4 of the Illinois Groundwater Protection Act requires the Interagency Coordinating Committee on Groundwater (ICCG) to report biennially on groundwater quality and quantity to the Governor and General Assembly. The Illinois EPA chairs the ICCG. Specifically, the Division of Public Water Supplies (DPWS) chairs the committee for the Director. The chair of the ICCG also serves as liaison to the Governor appointed Groundwater Advisory Council (GAC). The IGPA also requires the establishment of Priority Groundwater Protection Planning Committees by the Director of the Illinois EPA.

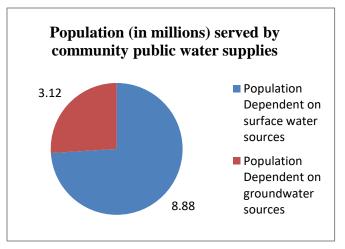
Introduction

In Illinois, regulatory oversight of public water systems (PWS)¹ is shared by the Illinois EPA and DPH. The Illinois EPA was designated as Illinois' primary enforcement authority by the U.S. EPA on August 29, 1979. The Illinois EPA, through an Intergovernmental Funding Agreement has empowered the Illinois DPH to administer the Non-Community PWS Program while the Illinois EPA retains regulatory authority over Community PWS².

¹ PWS serve 15 service connections or 25 residents.

² CWS serve 15 or more <u>year-round service</u> connections or 25 or <u>more year-round</u> residents.

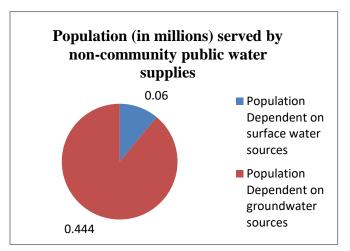
The Illinois EPA regulates 1,756 CWS. These water supplies utilize groundwater and surface water sources of potable water. At this time, 1,140 CWS use groundwater sources, 616 use surface water sources or groundwater sources under the direct influence of surface water, 12 use both ground and surface water sources, and 740 supplies purchase water from other CWS. A total of 12,031,118 persons are served by those systems; 39 percent of that population is directly served from surface water systems. Thirty five percent of the



population is served by purchased surface water, two percent by purchased groundwater, and 24 percent by groundwater systems. It is worth noting that although only 26 percent of the population is served by groundwater (including purchased groundwater), groundwater dependent

systems comprise almost 65 percent of the total number of CWS.

The Transient Non-Community (TNC) PWS served a population of 328,786 in 2019, while NTNC PWS served a population of 158,115. A total of 432,241 persons are served by systems using groundwater, while only 54,660 persons are served by surface water. These numbers reflect the areas where NCPWS are located predominantly in rural or non-incorporated areas where groundwater is generally available as a source of potable water.



STATUTORY BACKGROUND

The program to protect PWS in Illinois began in 1915 and has undergone considerable legal and regulatory restructuring over the years. In 1970, the General Assembly formulated the Illinois Environmental Protection Act (Act), 415 ILCS 5/14. They found that "state supervision of public water supplies is necessary in order to protect the public from disease and to assure an adequate source of pure water for all beneficial uses," and "It is the purpose of this Title to assure adequate protection of public water supplies." The Illinois Groundwater Protection Act (IGPA), 415 ILCS 55/1 was also adopted in 1987. Additionally, programs to protect groundwater were initiated by the Act in conjunction with "Water Quality Standards" for waters of the state that included underground water (35 Ill. Adm. Code 302). In 1991, the Illinois Pollution Control Board (IPCB) adopted comprehensive groundwater quality (35 Ill. Adm. Code 620).

The "core mission" of the Illinois EPA's Division of Public Water Supplies (DPWS) is to assure that all persons served by community public water supplies receive water which is safe in

quality, clean, adequate in quantity and of satisfactory mineral character for ordinary domestic consumption. To accomplish this goal, the DPWS oversees the design, construction and operation of CWS in Illinois. More specifically, the Illinois EPA must review the safety and protection of drinking water source water, implement a permitting program for the design, construction and operation of PWS treatment facilities, and maintain a surveillance program of water systems' untreated and treated waters.

To support these activities, the DPWS has been staffed by a diverse contingent of engineers, geologist and scientist that comprise the Compliance Assurance (CAS), Field Operations (FOS), Groundwater (GWS), and Permit (PS) Sections. The DPWS is further supported by the Infrastructure and Financial Assistance Section (IFAS) of the Bureau of Water (BOW), the Division of Legal Counsel, the Division of Laboratories, the State of Illinois' Central Management Services and Department of Innovation and Technology (DoIT).

As mentioned previously, the Illinois DPH supports the Non-Community PWS program through a series of rules including, but not limited to: the Illinois Plumbing Code (77 Ill. Adm. Code 890); the Illinois Water Well Construction Code (415 ILCS 30); the Surface Source Water Treatment Code (77 Ill. Adm. Code 930) and the Drinking Water Systems Code (77 Ill. Adm. Code 900). The Illinois DPH's Division of Environmental Health works to reduce the incidence of disease and injury related to environmental factors that fall within five major areas of responsibility: rulemaking; plan reviews and construction permits; inspections; vocational and facility licensing; and engineering and toxicological reports.

To support these areas of responsibility within the Non-Community PWS, Illinois DPH has field staff located in the Illinois DPH's six Regional Offices (RO) and leverages the resources of Local Health Departments (LHD). Compliance assurance and engineering services are generally conducted by staff located in the Central Office in Springfield. Consistent with the requirements of the Safe Drinking Water Act (SDWA) program activities include sanitary surveys, water analysis and reporting; plan review; technical assistance; and training and education.

Under the SDWA and subsequent amendments, the U.S. EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs) and Maximum Residual Disinfectant Levels (MRDLs). For some regulations, treatment techniques (TT) are established in lieu of an MCL to control unacceptable levels of contaminants in water. The SDWA also requires PWS to notify their consumers when they have violated these regulations. The consumer notifications must provide an understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of using alternative water supplies during the violation.

Through the ongoing review of Illinois EPA's programs, the U.S. EPA has granted the Illinois EPA primary enforcement authority to determine the frequency that CWS monitor and report on the contaminants present in their water. (Generally, the larger the population served by a water system, larger the number of samples collected and the more frequent the monitoring and reporting (M&R) requirements. Additionally, the U.S. EPA supports the development of new MCLs by requiring CWS to monitor and report on currently unregulated contaminants (e.g.,

Unregulated Contaminant Monitoring Regulation (UCMR)). As data are acquired for these contaminants, scientific analyses are conducted to determine the need for development of new MCLs.

In 1998, the Illinois EPA began making CWS revolving loans through a partnership with the U.S. EPA and the Federal Government. Since this time, the Illinois EPA has made more than \$2.3 billion in revolving loans to water systems. This money has gone to public water supply systems around the state to maintain compliance with federal and state laws and regulations and maintain and improve the state's drinking water infrastructure.

REPORTING REQUIREMENTS

Each quarter, the Illinois EPA submits data to the Federal Safe Drinking Water Information System (SDWIS/FEDERAL), an automated database maintained by the U.S. EPA. The data submitted by Illinois include, but are not limited to the following:

- PWS inventory information;
- incidences of violations of MCLs, MRDLs, monitoring, and TT violations;
- information on enforcement activity related to these violations; and
- source water protection information.

The Illinois EPA publishes a report on its web site which contains information on permits issued during the previous year. The report includes CWS construction and operating permit process including milestones that measure program efficacy.

The ICCG reports biennially to the Governor and the General Assembly on groundwater quality, quantity, and the State's enforcement efforts.

OVERVIEW OF THE PWS PROGRAMS IN ILLINOIS

Community Public Water Supply Surveillance Program

To sustain compliance with regulatory requirements and ensure the safety of Illinois CWS consumers, the Illinois EPA is committed to completing engineering evaluations (sanitary surveys) as frequently as possible. Through the DPWS' institutional knowledge, the more frequent the contact between the Illinois EPA and CWS, the higher the percentage of compliant water systems.

The focus of the Illinois EPA's inspections of CWS continues to be an evaluation of the general operation and maintenance practices at the respective systems. Inspectors evaluate state regulations under 35 Ill. Adm. Code and various ancillary programs that affect the CWS, such as the regulations under the Title IV: Drinking Water Security and Safety of the *Public Health Security & Bioterrorism Preparedness & Response Act of 2002* (Public Act 107-188, June 12. 2002). Fundamental aspects of these inspections also revolve around the provision of technical assistance, identification of significant deficiencies and necessary corrective actions to ensure the safety of drinking water supplies. The engineering evaluations include an on-site review of the eight components of the sanitary survey, including source, treatment, distribution system, finished water storage, pumps, monitoring & reporting, management & operation, and operator

compliance assessments. The DPWS conducts surveillance and inspections at CWS from six regional offices located in Rockford, Elgin, Champaign, Springfield, Collinsville and Marion.

With assistance of national stakeholder groups, the U.S. EPA has established that over the next two-year reporting cycle, state primary enforcement programs should complete sanitary surveys at a minimum of 79.5 percent of the CWS in their state on a 3-year frequency. For this reporting period (2017-2019), the Illinois EPA has conducted sanitary surveys at approximately 80.5 percent (1,414 of 1,756) of the CWS under its regulatory authority. In response to the U.S. EPA Calendar Year 2017 Joint File Review and Enforcement Verification Report, the Illinois EPA has added two additional field staff for increased regulatory oversight of CWS. While the number of sanitary surveys conducted has slightly increased within the most recent reporting cycle, the Illinois EPA anticipates significant progress in achieving and surpassing the stated goal indicated above. In addition, we are in the process of posting a field staff position in our Elgin Regional Office.

| Personnel | | | | |
|------------------------------------|------------------------------|--|--|--|
| Field Operations Section | | | | |
| Springfield Central Office | Champaign Regional Office | | | |
| Rick Cobb, Acting Division Manager | Vacant, Manager | | | |
| Vacant, Deputy Division Manager | Matt Talbert | | | |
| Steve Vance, Manager | Shane McCulley | | | |
| Rockford Regional Office | Springfield Regional Office | | | |
| Vacant, Manager | Jamie Cowles | | | |
| Joy Bliton | John Bartolomucci | | | |
| Andrew Holloway | Michael Dragovich | | | |
| | | | | |
| Elgin Regional Office | Collinsville Regional Office | | | |
| Segundo Nallatan, Manager | Gayle Renth, Manager | | | |
| Dwayne Booker | James Blessman | | | |
| Grover Hopkins | Regan Taylor | | | |
| Dharmishtha Patel | | | | |
| Gopi Ramanathan | Marion Regional Office | | | |
| | Vacant, Manager | | | |
| Marlene Diamond (Admin. Support) | John Kinder | | | |
| | Chris Johnston | | | |

Non-Community Public Water Supply Surveillance Program

The NCPWS surveillance Program shares many commonalities with the CWS surveillance activities. Sanitary surveys are intended to review the adequacy of the water system's source of water, facilities, equipment, operation and maintenance to ensure the production and distribution of safe drinking water. Sanitary surveys for NCPWS are intended to identify and correct significant deficiencies and are conducted once every two years by the Illinois DPH or LHD field staff. Illinois DPH Field Offices are located in Rockford, Peoria, Champaign, Marion, Edwardsville and West Chicago. There are 93 LHDs throughout the State that help conduct NCPWS surveillance and perform sanitary surveys. Illinois DPH RO staff and LHD staff that perform sanitary surveys generally work in several Public Health Surveillance Programs and many times conduct multiple program inspections while visiting a NCPWS.

Illinois DPH Policy sets a goal for completing sanitary surveys once every two years. For the 2017-2019 calendar year timeframe, the Illinois DPH has conducted sanitary surveys at approximately 96.3 percent of the NCPWS under its regulatory authority.

Community Public Water Supply Compliance Assurance Program

To ensure Illinois CWS are in compliance with state and federal statutes and regulations, the Illinois Pollution Control Board (IPCB) adopts identical in substance regulatory provisions from the U.S. EPA, per Section 5/7.2 of the Act. Ensuring that CWS are in compliance with these regulations, which include MCLs in drinking water, is substantially the core mission of the Compliance Assurance Section (CAS). Additionally, CAS coordinates technical outreach to water systems to assure proactive compliance measures are taken ahead of formal enforcement. The DPWS conducts compliance efforts for CWS from the Central Office in Springfield.

| Personnel | | | |
|--|--|--|--|
| Compliance Assurance Section | | | |
| | | | |
| Mary Reed, Manager | | | |
| Andrea Rhodes, Lead Specialist | | | |
| Shirley Leonard (Office Assistant) | | | |
| Vacant (Environmental Protection Specialist) | | | |
| Vacant (Office Coordinator 2) | | | |
| Chemical Monitoring Unit | | | |
| Jeri Long, Manager | | | |
| Paul Connelly | | | |
| Tatum DeMay | | | |
| Vacant (Environmental Protection Specialist) | | | |

Non-Community Public Water Supply Compliance Assurance Program

Similar to the CWS compliance program, the Illinois DPH tracks water system compliance with state and federal statutes and regulations. All NCPWS are tested at least annually for total coliform bacteria and nitrate. NTNC PWS are also tested for contaminants, such as pesticides, solvents, lead and copper, arsenic, metals and disinfection byproducts. Responsibility for tracking water system compliance is shared by Regional and Central Office staff. Data tracking activities are conducted by Central Office Staff.

| Personnel |
|--|
| Eric Portz, Safe Drinking Water Program Manager |
| Jamie Tossetti, Environmental Health Specialists |

Community Public Water Supply Operator Certification Program

The Illinois Public Water Supply Operations Act (415 ILCS 45/) establishes the statutory basis for the community water supply operator certification program in Illinois. This statute further establishes a reliable mechanism for Illinois EPA communications with CWS, ensuring that

Responsible Operators in Charge (ROINC) supervise the portions of the CWS for which they are accountable, and requiring the timely submittal of information that the Illinois EPA relies upon to protect drinking water quality. Finally, this statute provides the basis for the regulatory requirements found in 35 Ill. Adm. Code Part 681. The most recent amendments to this Part became effective in 2017. The 2017 revisions to the regulation focused on further defining the experience requirements to become a licensed water supply operator in Illinois.

The Illinois EPA would also like to make note of our training partners. The operator training opportunities provided by the Environmental Resources Training Center at Southern Illinois University-Edwardsville, the Illinois Potable Water Supply Operators Association, Illinois Rural Water Association, Illinois Section of the American Water Works Association and two-year colleges are a huge factor in the successful treatment of potable water in Illinois. Whether large conferences, webinars, semester long classes, regional forums or water system specific curricula these educators, associations and individuals have afforded opportunities to water professionals in Illinois that is unparalleled across the country.

The Illinois EPA's CWS Operator Certification Program is administered by the CAS of the DPWS. The Illinois EPA estimates that this program requires approximately two full time staff. The Operator Certification Program is coordinated by a staff member from the CAS of the DPWS:

| Personnel |
|---|
| Andrea Rhodes, Operator Certification Coordinator |

Non-Community Public Water Supply Operator Certification Program

The Illinois DPH NCPWS program administers a program to properly credential NTNC PWS from the Central Office in Springfield. The Illinois DPH uses the services of the Water Quality Association to conduct initial Operator Certification Training and administer, certification examinations. The following Illinois DPH Environmental Health Services staff is actively involved in the administration of the program:

| Personnel |
|---|
| Eric Portz, Safe Drinking Water Program Manager |
| Maria Crain, Administrative Assistant |

Community Public Water Supply Capacity Development Program

The Illinois EPA and DPH continue to support the Capacity Development Program and are convinced that maintaining PWS capacity is essential in operating a safe drinking water system. The original premises presented in the Illinois Capacity Development Strategy have proven accurate. Technical assistance remains the cornerstone in developing capacity in PWS that are in distress. Although the resource demands of capacity assistance are significant, Illinois continues to believe that capacity development is an integral element of the working relationship between regulatory staff and PWS officials. As such, capacity demonstration elements will continue to be integrated into the routine activities of both Agencies in order to ensure continued progress.

It is difficult to estimate the full-time equivalents devoted to this program as it is integrated into all aspects of the drinking water program. In several recent U.S. EPA evaluations of the Illinois

Capacity Development Program, U.S. EPA has expressed concerns that this program is understaffed. The Capacity Development program is now coordinated by a staff member from the Permit Section of the DPWS:

Personnel

Kent Cook, Capacity Development Coordinator

Non-Community Public Water Supply Capacity Development Program

The Safe Drinking Water Program Manager coordinates Capacity Development Program activities at Illinois DPH. Currently, the Program Manager reviews new NTNC Public Water System Construction Permit Applications and performs capacity reviews on these new systems. When capacity reviews are needed at existing NTNC Public Water Systems, the Program Manager coordinates the reviews with water system personnel and RO/LHD field staff.

Cross-Connection Control Program

The Cross-Connection Control Program in Illinois is one of several tools intended to protect water consumers in the state. Statutes in Illinois establish that no person can threaten a water supply and water supply officials are responsible for protecting their water mains from connections that have the potential to allow the backflow of contaminants into their respective distribution systems (a cross-connection). Regulations have been developed and modified to outline what comprises a viable Cross-Connection Control Program.

Water supplies in Illinois have significant partners in the implementation of their Cross-Connection Control Program. While it is up to the Illinois EPA to ensure that CWS have viable programs through physical inspection of water treatment facilities and documentation reviews, the Illinois DPH deals with the plumbing aspects of the program.

The Environmental Resources Training Center located at Southern Illinois University-Edwardsville provides for the training of licensed plumbers who wish to become certified Cross-Connection Control Device Inspectors (CCCDI). While any Illinois licensed plumber can inspect plumbing, or install a backflow device or assembly, only an Illinois CCCDI can test that device or assembly. Additionally, the Illinois EPA relies upon the Environmental Resources Training Center to track and properly credential CCCDIs.

It is difficult to estimate the full-time equivalents devoted to this program as it is integrated into all aspects of the DPWS's programs. However, the Cross-Connection Control Program Coordinator position remains vacant at this time.

Groundwater and Source Water Protection Program

The Groundwater and Source Water Protection Program in Illinois is framed by Public Acts 83-1268 and 85-063, and the SDWA Section 1453. These laws amended the Act, created the Illinois Groundwater Protection Act (IGPA) 415 ILCS 55/1, and led to the development of IPCB regulations for groundwater quality standards and protection requirements. Further, the IGPA requires stakeholder input from the ICCG and Groundwater Advisory Council (GAC) on the development of groundwater protection programs, laws and policies. The Act was amended to require the development and implementation of a "priority" Regional Groundwater Protection

Planning Program comprised of local stakeholders. In addition, the IGPA requires the ICCG to undertake a comprehensive evaluation of progress being made under these laws with biennial reporting to the Governor and General Assembly. The DPWS source water protection initiatives are generally managed from the Central Office in Springfield and the Rockford Office by the GWS of the DPWS. See the IGPA Biennial Report.

| Personnel | | | | | |
|----------------------------|----------------------------------|--|--|--|--|
| Groundwater Section | Source Water Protection Unit | | | | |
| Rick Cobb Manager | Anthony Dulka, Manager | | | | |
| Vacant, Office Associate | Vacant (Springfield Office) | | | | |
| | Laurie Moyer (Rockford Office) | | | | |
| | Greg White (Rockford Office) | | | | |
| Geographical Analysis Unit | Hydrogeology and Compliance Unit | | | | |
| Vacant, Manager | Bill Buscher, Manager | | | | |
| Ryan Bennett | Lynn Dunaway, Lead Geologist | | | | |
| Alan Fuhrman | Amy Zimmer | | | | |
| | Vacant, Environmental Protection | | | | |
| Keri Beckham, | Geologist | | | | |

Permitting Program

Correct construction and operation of a PWS is essential for providing a safe and adequate supply of drinking water. The DPWS conducts all permitting functions for CWS from the Central Office in Springfield.

| Personnel | | | |
|---|--------------------------------------|--|--|
| Permit Section | | | |
| David Cook, Manager | Chris Kohrmann, | | |
| Jenny Larson, Lead Engineer | Gerard Zimmer | | |
| Kent Cook | Carolyn Ealey, Office Coordinator | | |
| Cody Bauer | Vacant, Office Associate | | |
| Rongjuan Yang | | | |
| 2 Vacant, Environmental Protection Engineer | | | |

The Safe Drinking Water Program Manager conducts all permitting functions for NTNCWS from the Central Office in Springfield.

| Personnel | |
|---|--|
| Eric Portz, Safe Drinking Water Program Manager | |

Public Water Supply Revolving Loan Program

The PWS revolving loan program is administered by the Illinois EPA's BOW-IFAS. IFAS also administers the Water Pollution Control revolving loan program. IFAS manages all aspects of the funding process with input from the DPWS. Detailed program information is available on the

Illinois EPA web site at https://www2.illinois.gov/epa/topics/grants-loans/state-revolving-fund/Pages/default.aspx.

Generally, the first step toward the Illinois EPA working with an applicant to fund a project is the submittal of a planning report, called a "Project Plan" in Illinois' Administrative Loan Rules. An applicant must also complete a Project Planning Submittal Checklist which identifies the location of other necessary information for application processing. Once a scope of work is identified in a "Project Plan," IFAS staff will distribute the planning report to the PS and FOS for review and approval. The CAS is also consulted to ensure funding is provided to address the loan applicant's most pressing needs. Once comments from each of these Sections are received, IFAS sends a review letter requesting any additional information that is needed or answers to any questions the Illinois EPA may have. IFAS then produces a Project Summary document and the loan applicant will be required to either hold a public hearing (if the potential for environmental issues exists or if financial impacts to the loan applicant's residents are significant), or simply place an ad in the local newspaper announcing the proposed project and request for funding. The public hearing, or placement of an ad in the local newspaper, is followed by a 10-day public comment period allowing for the submission of written comments concerning the proposed project. Once the public comment period is over and IFAS receives proof of the public notification in the newspaper and any responses to any public comments, the Illinois EPA will issue Planning Approval. Planning Approval is good for five years. Therefore, once a scope of work has been identified and approved, the loan applicant can pursue funding for any portion(s) of that scope within the following five years.

The Illinois EPA's revolving loan funding process is unlike that of a bank in the respect that the Illinois EPA does not offer the funding agreement until after the recipient has demonstrated a definitive need for the project, obtained Illinois EPA Planning Approval, obtained all necessary permits, demonstrated the means and ability to

The U.S. EPA has determined that lead service line replacement is an eligible loan expense. Following a legislative amendment, the Illinois EPA processed its first lead service line replacement project in 2017.

repay the funding, adopted all necessary ordinances to do so and then gone out to bid on the project. Once a "winning/low" bidder is identified, the Illinois EPA can issue the Loan Agreement followed by the loan applicant entering into the contract for construction of the project. The Illinois EPA can fund the construction costs as well as planning efforts, design engineering and construction engineering/oversight. At the present time, loan applicants are anticipating a "Base" interest rate of approximately 1.4 percent for State Fiscal Year 2021. Interest rates are established each July 1 for the wastewater loan program, and the drinking water loan program, for the following 12-month period based upon one-half of the previous 12-month mean interest rate of the 20 General Obligation Bond Buyer Index. As of July 1, 2017, loan applicants can qualify for reduced interest rates (Small Community Rate and/or Hardship Rate) based upon their service population, median household income, unemployment rate and population trends. Loan applicants qualifying for the Small Community Rate or Hardship Rate also have the option of extending the term of their loan beyond the traditional 20 years, up to a maximum of 30 years, provided the term of the loan does not exceed the useful life of the funded project. Details on the fixed loan rate of a loan agreement and repayment periods can be found within 35 Ill. Adm. Code Part 662.

The BOW estimates that this program currently utilizes 17 full-time staff.

MEASURING RESULTS

Numerous tools are used to measure program effectiveness. The SDWIS/STATE is a key component in the tracking of overall program effectiveness. Quarterly uploads of data by the DPWS CAS and DoIT to U.S. EPA is the foundation by which the Illinois EPA and CWS are evaluated with regard to primacy requirements and program measures. Beyond these federal requirements, SDWIS/STATE is used by the DPWS to ensure that routine inspections of CWS are occurring, proper permits are obtained, and safe water is being supplied to Illinois' water consumers. Additionally, the PS utilizes a permit tracking data system to ensure that construction and operating permits are issued in a timely fashion. This tracking system is reliant upon the SDWIS/STATE as a framework, as is the Groundwater Section's PROTEUS system. PROTEUS is a database designed using web-based development tools. Groundwater, source water, and PWS engineering evaluation data and SDWIS/STATE continue to be integrated into the PROTEUS database.

Community Water Supply Compliance Assurance Program

For calendar year 2019, 98.6 percent (11,870,075 of 12,001944) of the population served by CWS in Illinois receive drinking water that meets all applicable health-based drinking water standards. Also, for calendar year 2019, 96 percent (1,691 of 1,756) of CWS in Illinois meet all applicable health-based drinking water standards.

Each quarter, the Illinois EPA submits data to the SDWIS/FEDERAL. The data submitted include but are not limited to: PWS inventory information; the incidences of violations of Maximum Contaminant Levels; Maximum Residual Disinfectant Levels; monitoring, and treatment technique violations; and information on enforcement activity related to these violations. This report provides the numbers of violations in each of six categories:

- 1) Maximum Contaminant Level violations;
- 2) Maximum Residual Disinfectant Level violations:
- 3) Treatment Technique requirement violations;
- 4) Significant violations of Monitoring and Reporting requirement violations;
- 5) Significant violations of the Consumer Notification requirements; and
- 6) Violations of Variances and Exemptions.

Appendix B of this report is a listing for each contaminant regulated by the SDWA, which includes the numbers of MCL, MRDL, Treatment Technique and M&R requirement violations for each compliance period during calendar year 2019, the number of violations that were returned to compliance (RTC), and the number of systems incurring violations. **Appendix C** and **Appendix D** of this report contain a detailed listing of PWS with MCL, MRDL, or Treatment Technique violations.

Acute vs. Chronic Indicators - It is important that safe drinking water be free of contamination which has the potential to cause either short-term or long-term health effects. Contaminants fall into two groups according to the health effects that they cause:

ACUTE

Acute effects occur within hours or days of the time that a person consumes a contaminant. People can suffer acute health effects from almost any contaminant if they are exposed to extraordinarily high levels (as in the case of a spill). In drinking water, microbes, such as bacteria and viruses, are the contaminants with the greatest chance of reaching levels high enough to cause acute health effects. Most people's bodies can fight off these microbial contaminates the way they fight off germs; and these acute contaminants typically do not have permanent effects. Nonetheless, when high enough levels occur, they can make people ill, and can be dangerous or deadly for infants, the elderly and persons whose immune systems are already weak due to HIV/AIDS, chemotherapy, steroid use, or another reason.

CHRONIC

Chronic effects occur after people consume a contaminant at levels over EPA's safety standards for many years. U.S. EPA develops the standards for chronic MCLs on the basis that a person may have an adverse health effect after consuming two liters of water daily over a 70-year lifetime. The drinking water contaminants that can have chronic effects are chemicals (such as disinfection byproducts, solvents, and pesticides), radionuclides (such as radium), and minerals (such as arsenic). Examples of the chronic effects of drinking water contaminants are cancer, liver or kidney problems, or reproductive difficulties.

As described previously, over 98 percent of the population served by Illinois CWS received drinking water in compliance with acute (short-term) health requirements, and 98 percent were in compliance with chronic (long-term) health requirements. It is important to note that most non-compliance was for a short duration, and the potential for health risk was minimized through prompt corrective action by the water supplies. Supplies with microbial problems (bacterial or turbidity non-compliance) are required to issue boil orders when the violation occurs. Community water systems with acute MCLs were limited to 14 (nitrate, nitrite and e coli MCL and SWTR TT) water systems.

Lead and Copper Compliance -

Lead and copper are regulated by a Treatment Technique that requires systems to control the corrosiveness of their water. The lead action level (15 parts per billion), when exceeded in more than ten percent of the water samples collected in consumers' homes, requires the water supply to implement optimal corrosion control treatment plans or In 2016, beyond the regulatory requirements of the Lead and Copper Rule, the Illinois EPA:

- Made revisions to sampling instructions and education materials to CWSs based upon information supplied by U.S. EPA, including deletion of any mention of "preflushing" lead service lines the night before sample collection and removing faucet aerators;
- Expedited the path from lab analysis of samples to consumers, in that CWSs now notify consumer/volunteer sample collectors of results greater than 15 ppb within 10 days of becoming aware of lab results.

procedures which would prevent anticipated adverse health effects and ensure that lead or copper is controlled in the drinking water.

In 2019, 790 CWS sampled for Lead/Copper. Twenty-five of these systems were over lead action level. In addition, 27 of these CWS were over the 90th percentile established for copper. These water systems were required to make timely notification to all water consumers of the

action level exceedance. Prior to this comprehensive announcement, water systems are required to advise voluntary monitoring participants of the outcome of their respective laboratory analysis and provide information regarding health effects and ways to minimize lead in drinking water. The notice to these monitoring participants is expedited (essentially immediate upon receipt of results) if the lead level detected is above a 15 part per billion threshold. Where necessary, the Illinois EPA follows up to ensure this notification has been properly administered.

Consumer Awareness for CWS - Every CWS must provide an annual water quality report (sometimes called a Consumer Confidence Report or CCR) to its customers. The report provides information on local drinking water quality, including the water's source, the contaminants found in the water, and how consumers can get involved in protecting drinking water. If the consumers have been looking for specific information about their drinking water, this annual water quality report will provide them with the information they need. In 2019, 92 percent of the CWS issued a satisfactory Consumer Confidence Report by the annual July 1 deadline.

Public Notification for CWS - In conjunction with each violation described in the previous sections, public notification is required to be issued. Public notification provides a means to protect public health, build trust with consumers through open and honest sharing of information, and establishes an ongoing, positive relationship with the community. Public notice can also be used to help consumers understand rate increases and support increased funding for drinking water treatment and protection. Properly done, the notices can work for the benefit of the water supplier as well as the public. If a problem occurs, educated consumers are more likely to understand the issue and support the actions a water utility must take. Many deadlines for public notice issuance depend upon prompt contact and discussion between the water system and Illinois EPA. Efficient communication with prompt reporting is the cornerstone for compliance. In 2019, less than two percent of the community water systems failed to meet all public notice requirements.

Public Education for Lead for CWS – Public education materials for lead must be provided to customers if a CWS exceeds the lead action level in their most current round of monitoring. As mentioned previously, approximately 97 percent of CWS were below the lead action level in their most recent round of sampling and therefore public education was not required. During 2019, 1 public education violation was issued.

Monitoring and Reporting Compliance for CWS - The U.S. EPA has established contaminant-specific minimum testing schedules for public water systems. Water systems typically monitor for bacteria, protozoa and viruses, nitrate and nitrite, volatile organic compounds (e.g., benzene), synthetic organic compounds (e.g., pesticides), inorganics (e.g., arsenic), lead and copper, radionuclides, and disinfectant disinfection by-products. Although failure to monitor does not necessarily suggest safety problems, conducting the required M&R is critical to ensure that problems will be detected. In 2019, 97.3 percent of community supplies were compliant with M&R requirements.

Illinois EPA Enforcement Strategy - The Illinois EPA has enforcement authority over CWS in Illinois. Illinois EPA has a standardized protocol for all enforcement matters to ensure, consistent treatment of enforcement cases. For any violation outlined in the previous pages, a failure to take

corrective action could result in the water system being considered for enforcement under Section 31 of the Act. Enforcement normally begins with the identification of a significant unresolved violation by technical staff. Information about the violator/violations is forwarded to the Compliance Group (composed of Section Managers). If the Compliance Group determines a Violation Notice (VN) is warranted, the VN recommendation is sent to the Illinois EPA's Compliance Management Panel for review. After review by the Panel, the CAS prepares and issues the VN. After the VN is sent, the violator will have a set time period (45 days or 60 days depending on whether a meeting is requested) to respond in writing with a Proposed Compliance Commitment Agreement (CCA). Enforcement activities are suspended if the proposed CCA is accepted by the Illinois EPA. If at a later point in time, the violator does not follow the CCA agreement, enforcement may resume.

If the proposed CCA is not accepted or the violator fails to respond to the VN, the case is brought before the Enforcement Decision Group (EDG), composed of senior BOW and Division of Legal Counsel management. The EDG determines the next course of action such as recommending a case for formal enforcement. Formal enforcement normally consists of referring the water system to the Illinois Attorney General or the U.S. EPA for filing with a court to direct corrective actions, which may include imposition of penalties.

Violation Summary - Current and historical violation data³ and follow-up enforcement actions can be found at the following web site: http://water.epa.state.il.us/dww/index.jsp.

The following table summarizes the number of CWS in violation with aspects of the drinking water compliance program during 2019.

| Violations during Calendar Year 2019 COMMUNITY Water Systems USEPA CDX Reporting Services Numbers | | | | | | |
|---|------------|----------------------|----------------------|-------------|-------------------------------------|-------------|
| Total Number of Regulated Systems 1756 | | | | 56 | | |
| Total Number of Systems in Violation | | | | 444 | | |
| Total Number of Violations | | | | 803 | | |
| | | Rule Subtotal | by Violation T | ype | | |
| Rule | MO | CLs | Treatment Techniques | | Significant Monitoring Reporting | |
| Category | Number | Number | Number | Number | Number | Number |
| | of | of Systems* | of Violations | of Systems* | of | of Systems* |
| | Violations | - | | - | Violations | - |
| Nitrates | 15 | 7 | NA | NA | 18 | 13 |
| IOCs | 27 | 11 | NA | NA | 1 | 1 |
| SOCs | 0 | 0 | NA | NA | 125 | 8 |
| VOCs | 0 | 0 | NA | NA | 107 | 9 |
| Coliform | 6 | 5 | 1 | 1 | 64 | 49 |
| Ground Water Rule | NA | NA | 0 | 0 | 1 | 1 |
| All SWTR | NA | NA | 0 | 0 | 0 | 0 |
| Radiological | 17 | 6 | NA | NA | 9 | 7 |

³ The data for this reporting originates and is maintained in the Illinois Safe Drinking Water Act Information System.

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| Violations during Calendar Year 2019 | | | | | |
|--------------------------------------|------|--|--|--|--|
| COMMUNITY Water Systems | | | | | |
| USEPA CDX Reporting Services Numbers | | | | | |
| Total Number of Regulated Systems | 1756 | | | | |
| Total Number of Systems in Violation | 444 | | | | |

Rule Subtotal by Violation Type

803

| | | | | | Significant | |
|------------------------|---|-------------|---|-------------|---|-------------|
| Rule | MCLs | | Treatment Techniques | | Monitoring Reporting | |
| Category | Number | Number | Number | Number | Number | Number |
| | of | of Systems* | of Violations | of Systems* | of | of Systems* |
| | Violations | | | | Violations | |
| DBPR (Stage 1) | | | | | | |
| (chlorine_chloramines) | NA | NA | 1 | 1 | 73 | 61 |
| | | | | | | |
| DBPR (Stage 2) | 31 | 17 | 0 | 0 | 52 | 28 |
| Lead & Copper | NA | NA | 16 | 15 | 76 | 68 |
| Public Notice | NA | NA | NA | NA | 78 | 51 |
| Consumer | NA | NA | NA | NA | 85 | 85 |
| Awareness | NA | | | | | |
| TOTALS | 96 | 46 | 18 | 17 | 689 | 381 |
| | Percentage of Systems In Compliance = 97.4% | | Percentage of Systems In Compliance = 99% | | Percentage of Systems In Compliance = 78% | |

Numbers from U.S. EPA-CDX Reporting Services. Although a CWS may be out of compliance with more than one contaminant or violation type, when calculating totals, it is counted no more than once within the population being totaled. So, the sum of NUMBER OF CWS IN VIOLATION, over the various violation types or contaminants, may not add up to the total.

Non-Community Water Supply Compliance Assurance Program

Total Number of Violations

Both NTNC and TNC are required to monitor for contaminants like CWS and issue public notification if in violation. However, TNC only monitor for nitrates, coliform bacteria, and are subject to some requirements of the surface water treatment rule (if they use surface water). NTNC monitors the same contaminants as CWS but are not required to monitor radionuclides or issue/publish a Consumer Confidence Report.

Lead and Copper Rule- The Illinois DPH conducts a thorough review of sample results at NTNC PWS with special emphasis on schools and daycares. The Illinois DPH reviewed and revised sample site selection criteria and sampling protocol in 2016. These documents were revised based on sampling protocol recommendations from U.S. EPA following Flint and ensure sample site locations represent the highest level of health protection based on the criteria of human consumption and "worst case" risk for lead leaching. Illinois DPH included these documents in a quarterly sample schedule letter sent to all NTNC PWS in June 2016 and requested that all systems re-submit a sample site plan prior to their next Lead/Copper sampling event. This was fully implemented in 2017 and all Lead and Copper sampling are now conducted following the revised sample site collection criteria and sampling protocol.

At the end of 2019, only 10 NTNC PWS were over the lead action level, thus 97.9 percent of systems were below the action level. Illinois DPH will continue to follow-up with these 10 water systems to meet the lead action levels and the follow-up activities required under the LCR.

Illinois DPH Enforcement Strategy - The Illinois DPH has enforcement authority over NCPWS in Illinois. Illinois DPH has a standard protocol for enforcement matters to ensure consistent treatment of enforcement cases. For any violation outlined in the previous pages, a failure to take corrective action could result in the water system being considered for enforcement under Section 9 of the IGPA. Enforcement normally begins with identification of a significant unresolved violation by technical staff. The Illinois DPH RO or LHD determines an appropriate amount of time to perform corrective action and send a VN to the water supply requesting corrective action within the time frame allowed. If corrective action is not performed within this time frame, information is forwarded to the Illinois DPH Central Office to initiate formal enforcement action. A letter is then sent to the State's Attorney, the Attorney General or U.S. EPA requesting enforcement action which may include imposition of penalties.

Illinois DPH uses the automated compliance determination modules for compliance for most of the major rules. Manual compliance is used for surface water rule compliance as Illinois DPH numbers have now decreased to ten surface water systems and only three of these are Non-Transient Non-Community Water systems with conventional treatment. The other seven systems are Transient Non-Community Water Systems that utilize slow sand filtration systems.

As detailed under future directives, Illinois DPH was able to complete 2019 nitrate compliance determinations in SDWIS\State and will provide complete reporting of the violations enumerated in the table below. Unfortunately, Revised Total Coliform Rule (RTCR) and Groundwater (GW) Rule compliance determinations in SDWIS\State and reporting for treatment technique and monitoring violations could not be completed again in 2019. Resource limitations and stressors that contributed to this deficiency are detailed under future directives. In addition, corrective actions being taken to complete these activities are also detailed under future directives. These corrective actions have been discussed in detail with the USEPA Region V office.

Violation Summary - During calendar year 2019, the percentage of persons served by Illinois NCPWS that were compliant with all health requirements, treatment techniques, or health advisories was 99.8 percent**. The following table summarizes the number of NCPWS in violation with aspects of the drinking water compliance program.⁴

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⁴ These figures are not complete because Coliform Treatment Technique and Coliform / GW Rule monitoring data have not been verified with Local Health Department (LHD) staff, which has direct oversight for these water systems. MCL data is complete.

| Violations during Calendar Year 2019 NON-COMMUNITY Water Systems | | | | | |
|---|-------|--|--|--|--|
| Total Number of Regulated Systems | 3,692 | | | | |
| Total Number of Systems in Violation | 1230 | | | | |
| Total Number of Violations | 8,375 | | | | |

Rule Subtotal by Violation Type Significant Rule **MCLs Treatment Techniques Monitoring Reporting** Category Number Number Number Number Number Number of Systems of of of Systems of of Violations Violations Violations **Systems** Radiological NA NA NA NA NA NA $2,81\overline{4}$ 1.131 **IOCs** 11 NA NA 5 SOCs 0 0 NA NA 3,208 114 VOCs 0 0 87 NA NA 2.109 Coliform 2 2 0* 0* 28* 26* 0 0* 0* Ground Water 0 0 0 Rule **SWTRs** 0 0 0 0 0 0 DBPR (Stage 2) 3 2 0 0 90 32 Lead & Copper NA 0 0 110 92 NA 0*** Consumer NA NA NA NA 0 Awareness **TOTALS** 16 8,359 1,228 Percentage of Systems Percentage of Systems Percentage of Systems In Compliance = 99.8%In Compliance = 100%In Compliance = 66.7%****

Although a NCPWS may be out of compliance with more than one contaminant or violation type, when calculating totals, it is counted no more than once within the population being totaled. So, the sum of NUMBER OF NCPWS IN VIOLATION, over the various violation types or contaminants, may not add up to the total.

Community Water Supply Operator Certification Program

The Illinois EPA administers the Drinking Water Operator Certification program through authority granted by the Illinois Public Water Supply Operations Act (PWSO Act), 415 ILCS 45/et seq. The Act provides rule making authority to the Illinois EPA. The Illinois EPA has promulgated these rules in 35 Illinois Administrative Code Part 681. The State ensures the public health objectives of the national Operator Certification Guidelines, published in the Federal Register on February 5, 1999 are met by the Illinois EPA's program.

^{*} These figures have not been verified with Local Health Department staff that have direct oversight for these water systems.

^{**} This data is incomplete at this time due to Coliform and GW Rule treatment technique and monitoring data.

^{***} Illinois DPH does not include public notice for monitoring violations in the compliance rate.

^{****} This number is very high due to the Illinois DPH lab discontinuing Nitrate testing for Non-Community Water Systems. Illinois DPH is committed to bringing these systems back into compliance for Nitrate Monitoring.

Illinois regulations require that owners and official custodians of a public water supply in Illinois must provide under the Environmental Protection Act, Board Rules and the Safe Drinking Water Act, continuous operation of public water supply

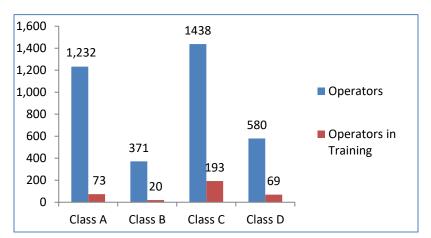
Illinois' Operator Certification Regulations can be found at the following web site: ftp://www.ilga.gov/JCAR/AdminCode/035/035parts.html

facilities to assure that the water is safe in quality, clean, adequate in quantity, and of satisfactory mineral characteristics for ordinary domestic consumption. Under the Public Water Supply Operations Act, all portions of a Community Water Supply (CWS) must be under the direct supervision of a Responsible Operator in Charge (ROINC). Each CWS must employ on its operational staff or by contractual agreement a ROINC. The ROINC is required to hold a valid drinking water operator certificate at a level equal to or greater than the classification of the CWS. The owner or official custodian of a CWS and the ROINC must file a signed statement identifying the ROINC on forms provide by the Agency. Each individual who is a ROINC for a CWS is jointly accountable with the owner of the CWS for the proper operation of the portions of the CWS over which he or she has been designated as the ROINC. The ROINC at a CWS makes all decisions concerning the proper operation of the water supply that may affect public health. When not physically present at the CWS any operational decisions may be communicated from the ROINC by telephone, e-mail, or a Standard Operating Procedure implemented at the facility. Operational personnel may perform day to day operations and may carry out any operating instructions conveyed by the ROINC.

In 2019 there were 1,756 CWS facilities in Illinois. These facilities are divided into four classifications based on the complexity of treatment: Class D facilities are CWS with limited pumpage, storage and distribution systems. Class C facilities are CWS whose treatment facilities are limited to chemical addition. Class B facilities are CWS whose treatment facilities include filtration, filtration and aeration, or ion exchange. Class A CWS are water treatment facilities that employ surface water treatment techniques, including coagulation, lime softening, sedimentation, or advanced filtration. In 2019, there were 463 Class D, 711 Class C, 421 Class B, and 160 Class A CWS.

A CWS may be designated as Exempt. Pursuant to Section 9.1 of the Public Water Supply Operations Act, a community water supply is not required to have a ROINC if it consists only of distribution and storage facilities and does not have any collection and treatment facilities; obtains all of its water from, but is not owned or operated by, a CWS that is required to employ a Class A, Class B, Class C, or Class D community water supply operator; does not sell water to any person; and is not a carrier that conveys passengers in interstate commerce. In 2019, there was 1 Exempt CWS.

In 2019, there were 3,621 fully certified drinking water operators in Illinois. The certification level breakdown was as follows: 1,232 A operators, 371 B operators, 1,438 C operators and 580 D operators. Illinois does not have a separate certification for distribution operators. Certification at a D level covers distribution systems;



certifications at higher levels are cumulative; and include qualifications for distribution operations.

Any change in facility classification is generally communicated by the Field Operations Section to Drinking Water Compliance personnel. The change is documented in the Safe Drinking Water Information System (SDWIS). A change in classification may be required if there is a significant change in a treatment process at a CWS. If the change in classification of the CWS necessitates a change in certification requirements for an operator, the water system is notified by Field Office Section personnel. There were no changes to CWS classifications that affected operator requirements during 2019.

To become a certified drinking water operator in Illinois, a person must first take and pass an exam. The exams are comprised of multiple-choice questions which establish that person has the necessary knowledge to perform the job. A passing score is 70 %. In 2019, Illinois offered exams at 12 locations with 36 exam dates. On several of the 36 exam dates, exams were offered at more than one location, resulting in 54 exam opportunities. Exams are graded by Environmental Resources Training Center through contractual agreement with the Illinois EPA. Grades are sent to the Agency and pass/fail letters are issued by the Agency. The following number of exams were attempted in 2019: Total: 908 total exams; 135 Class A; 81 Class B; 447 Class C; and 245 Class D. In 2019, the pass rate was 30.4 % for the A exam, 33.3% for the B exam, 27.5% for the C exam, and 31.8% for the D exam. The pass rate may seem low, but a person does not have to have any experience in the industry to take the exam which may skew the results slightly.

A person earns the title of Operator in Training (OIT) once they achieve a passing score on an exam. The certificate for an OIT is valid for a period of six years. An OIT is not fully certified and therefore is not able to act as a ROINC for any water system. To obtain full certification, an OIT is required to submit an application showing that the education (a high school diploma or GED) and experience requirements have been met for the level of certification requested. At one time the Illinois EPA required proof of a high school diploma or GED prior to allowing a person to sit for an exam but that was changed in 2017. The change was made to promote internships by allowing a high school student to attempt the exam before graduation. A high school diploma or GED is required to meet the qualifications for full certification. The minimum experience requirements defined in the regulation must be met before full certification will be granted. The

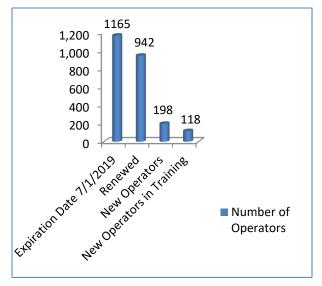
minimum criteria were established to help ensure that certified operators have the knowledge and understanding of the public health reasons for drinking water standards.

Late in 2017, Illinois adopted a revision to the operator certification regulations. An applicant must meet the experience requirements defined in hours. Certification for a Class A requires 5340 hours of experience, a Class B requires 5340 hours of experience, a Class C requires 1780 hours of experience, and a Class D requires 890 hours of experience. A portion of the experience requirements may be met with advanced education or training pertinent to the field. At least ½ of the hours accumulated toward the certification requirements must be hands on experience with the processes that define the level of certification. For example: a person working toward certification as a C operator must show that they have at least 890 hours of hands-on experience with chemical feed processes. The other 890 hours can be comprised of hands-on experience with other processes at the water treatment plant, training courses, or education. No significant regulatory changes were made to the operator certification program in 2019 therefore no backsliding occurred. A person may hold a valid certification and be an OIT at a higher certification level at the same time. During 2019, there were a total of 355 OITs broken down as follows: 73 A OITs, 20 B OITs, 193 C OITs and 69 D OITs. Of the total number of OITs, 83 individuals held valid certifications at one level and held an OIT designation at a higher level. Of the total number of OITs listed previously (355), 118 earned their OIT status in 2019 broken down as follows: 18 A OITs, 7 B OITs, 69 C OITs, and 24 D OITs. Additionally, 198 OITs met the requirements to become fully certified in 2019, comprised of: 38 Class A; 39 Class B, 64 Class C; and 57 Class D certifications.

Early in the Operator Certification program, "grandfathering" of operators was permitted. Upon successful completion of a program, a certificate was awarded at the same level as the water system for which the person was responsible. The certifications were site specific and non-transferable. The grandfathered operator was then required to obtain renewal training hours in the same manner as non-grandfathered operators to maintain their certification. The grandfathered operator is required to renew their certification every three years. At one time, Illinois had 139 operators with grandfathered certifications. In 2019, 22 of the certifications were still valid. Illinois no longer issues grandfathered certifications for CWS.

Illinois offers reciprocal certifications to operators on a case by case basis. Illinois has a residency requirement; applicants must either live or work in Illinois to be eligible for reciprocity. The requirements for certification in the state from which the applicant is requesting reciprocity must be at least as stringent as the requirements in Illinois. Additionally, that state must in turn offer reciprocity to Illinois certified operators. In 2019, Illinois issued 7 certifications through reciprocity: 3 A certification, 1 B certification, 2 C certifications, and 1 D certification. Illinois also offers reciprocity to military veterans. We had one application for military reciprocity and granted 1 Class C certification through that process in 2019.

Approximately one-third of operators have certificates that are due for renewal by July 1 of each year. All Illinois drinking water operators are required to have renewal training hours as a prerequisite for their certificate renewals. Training courses are approved by the Illinois EPA to ensure that the subject matter is acceptable and applicable to the profession. Training courses are reviewed throughout the year as they are submitted. Approved courses are given a unique course ID. To assure trainees that a course is acceptable for credit, it is highly encouraged that courses be submitted and reviewed before training occurs. The



Agency will review some courses after attendance on a limited basis. Most of these are single courses submitted by operators working out of state trying to maintain their Illinois certifications. A list of approved training courses can be found on the Operator Certification System link on the Illinois EPA website. Operators with a valid A or B Certification are required to obtain 30 renewal training hours per each 3-year renewal period. Operators with a valid C or D certification are required to obtain 15 renewal training hours per each 3-year renewal period. A minimum of two thirds of the required training must be comprised of courses that are technical in nature. The other third of the required training may be comprised of technical or non-technical courses such as safety or management. In March of the year that their certificate is set to expire, operators are sent a Renewal Application Form and Training Summary Report to advise them of their remaining hours required for certificate renewal. In 2019, 942 operators successfully completed the required training and renewed their certificates while 223 operators had certificates that expired. Non-compliance Advisories (NCA) were sent to 4 CWSs that had ROINCs with certificates that expired in 2019. Two of the systems that received NCAs had the same operator. The operator running those two systems renewed his certification by July 31, 2019. The other two operators restored their certifications before the end of August 2019. Illinois has a one-month grace period for submittal of the renewal application and the fee. Two of the CWS were in compliance with the operator requirement prior to the end of the grace period and the other two were in compliance within a month of the end of the grace period. Therefore, there was no formal enforcement for any of the four systems.

If an operator fails to renew their certification within the three-year period, the certification expires. The operator then has two years in which to provide documentation of successful completion of the required renewal training hours to restore their certification. However, the date of expiration of the restored certificate remains the same as it would have been had they renewed on time. If certification is not restored within a two-year period, the certificate becomes invalid and to recertify, the person must retest and apply as if they were seeking certification for the first time. The Illinois EPA issued 28 restorations in 2019, 13 for certifications that expired July 1, 2019 and 15 for certifications that expired prior to 2019.

The Illinois EPA uses SDWIS and an internally developed Operator Certification database to track certification requirements. Information is queried weekly to determine compliance with the requirement for each CWS to employ a ROINC. A report is run bimonthly to maintain consistency between the two databases. The regulations state that a CWS must have a ROINC at all times. Illinois EPA does not issue temporary certifications. Once the Agency becomes aware of a CWS without a ROINC, a non-compliance advisory (NCA) is issued. During 2019 the Illinois EPA sent 49 NCAs. The 4 NCAs issued to CWSs with expired certificates were in addition to the 49 issued to systems who lost ROINCs throughout the year. The Agency assumes that there is a ROINC on staff, but the paperwork has not yet been filed. A CWS is given 15 days to submit the paperwork notifying the Agency of the ROINC. A formal Violation Notice (VN) consistent with Section 31 of the Act is issued if the 15 days pass without a response.

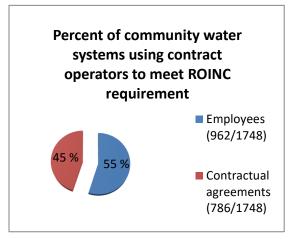
The VN, in turn, can be followed by a Notice of Intent to Pursue Legal Action. The culmination of this process is a referral to the Attorney General's Office to ensure compliance and to seek a monetary penalty. The Illinois EPA generally feels this process has been effective as documented by the high compliance rates described below.

In 2019, five water systems were enforced against for failure to have a properly accredited responsible operator in charge.

For CWS who hire ROINCs contractually, the Illinois EPA reviews and tracks the contracts. When a contract is received it is logged in to SDWIS under the compliance schedule module. The contract is sent to the appropriate Field Office where it is reviewed for content pursuant to 35 Ill. Adm. Code 681.1000. If a contract is acceptable, an approval letter is issued. If a contract is missing one or more of the required parameters, the contract is rejected and the CWS is sent a letter giving the CWS 15 days to resubmit an acceptable contract. If the CWS fails to comply with the rejection letter or if they failed to submit a contract for review, a VN is issued. No VNs were issued for expired contracts during 2019.

The Agency sends the CWS a reminder letter 60 days prior to expiration of the contract. If a new contract is not received in a timely manner, the Compliance Assurance Section follows up with a phone call and/or e-mail. If the CWS still does not comply, a VN is issued.

During this reporting period, the Illinois EPA issued 5 VNs to water systems to address their lack of properly credentialed operational staff⁵. Of the total number of VNs issued, 2 were issued to found systems. These were small systems that were discovered as meeting the definition of a



CWS but were unaware of that previously. Both had multiple violations in addition to their failure to have a ROINC. Although both cases have been referred to the Illinois Attorney

⁵ In the previous reporting cycle the U.S. EPA questioned whether the Illinois EPA could begin inputting a type 12 violation to track operator noncompliance concerns. Upon research, this code has very limited application and would not supply the intended information.

General's Office for further enforcement, they currently have ROINCs. One system hired a ROINC within 1 month of receiving the VN and for the other it took 5 months. One VN was issued solely for a system's lack of operator and they achieved compliance within 2 weeks of receiving the VN. The remaining two systems were issued VNs for multiple violations including lack of a ROINC. One of the systems achieved compliance within 3 months and the other is still without a ROINC and has been referred to the Illinois Attorney General's Office for further enforcement.

In addition to enforcement actions under Section 31 of the Act, the Illinois EPA has the following tools to ensure actions by water supply officials are in the best interest of protecting public health:

- The PWSO Act gives the Illinois EPA the authority to issue an administrative citation (AC) for certain paperwork violations committed by ROINC.
 - o The Illinois EPA issued no ACs in 2019.
- The Illinois Environmental Protection Act makes it a Class 4 felony for a person to knowingly make a false, fictitious or fraudulent material statement, orally or in writing to the Illinois EPA. Due to budgetary constraints, the Illinois EPA refers criminal cases to the Criminal Investigation Division of the U.S. EPA.
 - One criminal case was referred to the criminal investigation attorney in the Illinois EPA Division of Legal Counsel during 2019.
- 35 Il Adm. Code 681, Subpart G provides the procedure whereby the Illinois EPA may revoke or suspend an operator's certification.
 - There were no suspensions or revocations in 2019.

The Illinois EPA, through statutory authorization, administers a fee program to recover a portion of the cost of administering the Operator Certification Program. Fees are collected for application, renewal, and reinstatement. Certification fees are processed daily by the Compliance Assurance Section and sent to the Illinois EPA's Division of Fiscal Services. These fees are tracked on reports. The Illinois EPA continues to emphasize the importance of the Operator Certification Program and utilizes several funding mechanisms, such as SRF Administrative fund, to overcome shortfalls in the existing fee structure. Illinois EPA provides sufficient resources to adequately fund and sustain its operator certification program (i.e. staff, data management, testing, enforcement, administration, and training approval).

The success of the program also relies on both internal and external reviews of the CWS Operator Certification Program. The Operator Certification Program is under constant review to clarify regulations in place and to strengthen the existing program. Participation in meetings with other Region 5 States has been advantageous in understanding of implementation of their programs and formulating strategies for improvement of Illinois' program. The Illinois EPA provides outreach at two large conferences and numerous operator meetings during the year to update operators on regulatory changes.

The Illinois EPA meets with the Illinois Public Water Supply Operator Certification Advisory Board at least two times per year. For meeting times, minutes and agendas see https://www2.illinois.gov/epa/topics/drinking-water/operator-certification/Pages/default.aspx

During these meetings, the Advisory Board reviews proposed changes to the Operator Certification Regulations, reports from the Exam Committee, application/applicant approval process for testing, and training criteria. The Advisory Board been requested to review and mediate disputes by operators and held a special meeting in May 2019 for one such request. At these meetings, the Illinois EPA is also provided direction for Operator Certification Program enhancements. They have been an invaluable resource over the past several years as the Illinois EPA has had major changes to the drinking water operator regulations.

The Illinois EPA also meets annually with the Examination Review Committee. The committee is comprised of Agency personnel from the regulatory units as well as the Field Office Section, subject matter experts and training partners. This Committee is supported by the Environmental Resources Training Center through contractual agreement with the Illinois EPA. The examination committee reviews and updates questions in the data bank and develops new questions as regulations change. In addition, pass/fail rates of each exam, and pass/fail rates of each question on the exams are reviewed. In 2019, the D exam was revised, and the Illinois EPA hopes to have the new exam finalized for use in 2020. It is important to note that the Environmental Resources Training Center is also the location of one of the state's leading water and wastewater training facilities and has been integral in assisting the Illinois EPA in the development of the certified operator database, use of modernized testing software and development of technical assistance documents.

The Illinois EPA would like to make note of our training partners. The operator training opportunities provided by the Environmental Resources Training Center at Southern Illinois University-Edwardsville, the Illinois Potable Water Supply Operators Association, Illinois Rural Water Association, Illinois Section of the American Water Works Association and two-year colleges are a huge factor in the successful treatment of potable water in Illinois. Whether at large conferences, webinars, semester long classes, regional forums or water system specific curricula, these educators, associations, and individuals have afforded opportunities to water professionals in Illinois that is unparalleled across the country.

Non-Transient Non-Community Water Supply Operator Certification Program

All major program elements for the NTNC Water Operator Certification Program have been implemented. (As previously described NTNC are PWS serving at least 25 of the same non-residents for 6 months per year.) Currently there are 431 of these systems in Illinois. Over the reporting period, 383 (88.9 percent compliance) of these have properly certified responsible operators. For the 109 NTNC systems that have some type of chlorine disinfection installed, 101 (approximately 92.7 percent) have a certified operator. There are 562 NTNC water supply operators that are currently trained and certified in Illinois (493 are certified by the Illinois DPH and 69 are certified by the Illinois EPA).

Initially, NTNC operators must pass a 12-hour course consisting of eight sections with an exam at the end of the course. This course is currently administered by the Water Quality Association in coordination with Illinois DPH. Course applicants must have a high school diploma or equivalent, or must be currently employed by a non-transient, non-community public water system. Periodically, a review of the course's eight sections is done to evaluate the effectiveness of the training, ensure quality, and compliance with U.S. EPA's guidelines. The eight sections of

the course include: 1) workplace safety; 2) source water characteristics; 3) equipment maintenance; 4) sampling requirements and procedures; 5) system disinfection; 6) emergency procedures; 7) administration for water supply operations; and 8) mathematics. Currently, no fewer than two initial courses are held annually allowing systems to maintain operator compliance. In 2019, 68 new operators were certified through these two courses. The passing rate for these courses was approximately 96 percent.

After the initial training, operators must meet training requirements for subsequent certificate renewals. Certification renewals began in the fall of 2005. Illinois DPH phased-in the renewal-training requirement as approximately one-third of the operators renew their expiring certificates each year. All NTNC operators must complete an approved renewal course as a prerequisite for their certificate renewals. Operators who renew are required to submit documentation to the Illinois DPH that they have taken the required training.

Renewal course guidelines were reviewed with several industry-wide water education organizations (e.g., typically IL Section AWWA and IL Rural Water Association are consulted and in recent years IL Rural Community Assistance Program has been consulted.). After this review was complete, computer-based training, meeting renewal-training requirements was chosen as the most effective option available. The Illinois DPH selected the Operator Basics 2005 Program developed by the Montana Water Center in cooperation with U.S. EPA as the renewal course.

In June of each year, operators are sent a letter advising them of their expiring certificates. This letter provides instructions on how to download and complete the course or how to order the CD version from the National Environmental Services Center. As of April 30, 2008, the availability to complete the Operator Basics 2005 Course online was discontinued by the Montana Water Center. The Illinois DPH acquired a supply of CDs from National Environmental Services Center and, in the letters mailed, informed operators a CD could be obtained directly from the Illinois DPH.

Feedback on the course remains positive; however, Illinois DPH is concerned that the Montana 2005 Basics Course is no longer available for download from the Montana website and CDs are having increased technical problems. This course has been the Illinois DPH standby for operator recertification. This being the case, Illinois DPH is getting help from technical providers for classroom sessions. Rural Community Assistance Program (RCAP) provided two classroom recertification courses as an option to the Montana Course in 2019. Illinois DPH will continue to use help from RCAP in 2020 and review other options for recertification opportunities. In 2019, 145 current operators renewed their certifications by completing the Operator Basics Course or attending an RCAP classroom session.

In August of each year, all NTNC PWS are sent "Operator Summary" letters informing them of the operators registered with Illinois DPH. This information is tracked in an Access Database and these letters notify each system of any operators with expiring certificates and the importance and legal responsibility of having a properly certified responsible operator.

Non-compliant, NTNC water supplies are immediately advised of the serious nature of not having a properly certified responsible operator and options for achieving compliance. Formal enforcement is evaluated for systems that are significantly non-complaint. Enforcement actions are conducted similar to water quality or monitoring violations. A VN is sent and formal enforcement follows if the water system does not take action. Some LHDs are issuing violations for operator compliance, but the Illinois DPH has not been inputting those in SDWIS/STATE the last four years due to resource limitations, but the information is tracked in an Access database. However, the water supplies requiring enforcement action has decreased over time.

Current Compliance Drop. The current compliance rate of 88.9 percent is the same as 2018 but lower than it has been the last few years. This drop-in compliance may be due in some part to Illinois DPH employee turnover. The previous operator compliance officer retired in mid-2018. This position covers three Illinois DPH programs that perform licensing and certification among many other duties. The adjustments necessary to compensate for this retirement and replacement of a long-time employee that had performed these duties allowed a lapse in tracking and compliance rate. However, COVID-19 did not allow follow-up on the systems missing operators prior to this report being written. Illinois DPH believes the rate is actually higher and that the compliance rate will be back up to the previous high levels in 2020.

U.S. EPA has expressed concern regarding the status of NCPWS that chlorinate and that utilize surface water sources. Eight of these systems (7.3 percent) are currently out of compliance with operator requirements. As discussed above, these systems are contacted immediately by Regional Office or LHD field staff. This approach is limiting any period of Non-compliance to a maximum of only a few months. The Illinois DPH Central Office Program staff are monitoring any schools/daycares that chlorinate and contacting these systems directly if operator non-compliance persists. **Currently, there are no schools or daycares that chlorinate and do not have a properly certified operator.** The compliance rate for chlorinating water systems dipped slightly to 92.7 percent in 2019. This drop may have also been due in part to the retirement of the previous operator compliance officer and the adjustment period. Illinois DPH believes these compliance rates will be above 95% in 2020.

The Illinois DPH continues to place emphasis on the seven TNC PWS that use surface water as their source. The Illinois DPH will continue providing training to these facilities on a periodic (as needed) basis. Since these systems receive annual sanitary surveys by RO staff, technical assistance opportunities are conducted at least once per year.

The number of NTNC PWS on the U.S. EPA ERP non-compliance list continues to remain lower than past totals. This success is, in-part, attributable to the Operator Certification Program providing qualified operators for NCPWS. Further, the Illinois DPH has instructed Regional Office (RO) staff and LHDs to increase efforts to contact systems without a certified operator to keep compliance rates high. Indications are that this strategy is having success.

As mentioned above, the Illinois DPH sends an annual letter to each NTNC PWS with the certification status of all operators on file. The dates of new operator classes are also sent to all NTNC PWS prior to each class. In June of each year, a letter goes out to all certified operators that are due for re-certification by the end of the year. Each time these letters are sent out a list of

systems in non-compliance is sent to the ROs and LHDs instructing them to contact these water systems. ROs and LHDs are also instructed to cite operator non-compliance as a significant deficiency in sanitary surveys.

Stakeholder Involvement. The Illinois DPH intended to solicit increased stakeholder involvement in the operator certification program during the formal rule-making process for the Illinois DPH State Specific Revised Total Coliform Rule (RTCR). However, delays in the rulemaking process did not allow this to take place in 2019. IDPH will evaluate if this is necessary in 2020 as comprehensive input is generally received from the 431 regulated NTNCPWS during trainings, sanitary surveys and thru telephone and electronic correspondence.

Illinois DPH ensures the public health objectives of the national Operator Certification Guidelines, published in the Federal Register on February 5, 1999, are met by Illinois DPH's program. With respect to the nine baseline standards established by the U.S. EPA for the operator certification program, the following summarizes the Illinois DPH program status:

- *Authorization* Illinois DPH implements the Operator Certification Program under the Drinking Water Systems Code (77 Ill. Adm. Code 900.45). The authorization is by Section 9 of the Illinois Groundwater Protection Act, (415 ILCS 55/9).
- *Certification* Process control/system integrity decisions are made under the supervision of the certified operator.
- *Grandfathered NTNCW Operators* Grandfathered operators are not allowed. All NTNCPW must have a properly certified operator.
- *Operational Requirements* The certified operator does not have to be present at each operating shift. However, operations are conducted under the certified operator's direction and oversight.
- *Enforcement* 77 Ill. Adm. Code 900.45(d) outlines the process to suspend or revoke an operator. Illinois DPH has not suspended or revoked an operator in the recent past.
- *Certification Renewal* Illinois DPH requires operators to go through the initial certification class if they fail to recertify within two years of certification expiration.
- **Resources needed to Implement the Program** Illinois DPH personnel listed in the overview section above are funded under the PWSS Grant funds. Sufficient resources have been provided to run an adequate program.
- *Stakeholder Involvement* Stakeholder involvement in the operator certification program operations and possible revisions will be evaluated in 2020.
- **Program Review** Illinois DPH reviews all aspects of the operator certification program as needed. In particular, training materials are reviewed as new Primary Drinking Water Standards are revised. Budgeting, staffing and data management are reviewed as needed.

Capacity Development Program

A review of SDWIS/STATE data indicates that 111 new CWS and 133 new NCPWS have been activated since October of 2003 (6 and 15, respectively, of which have subsequently become inactive). As described in the *ILLINOIS ANNUAL REPORT ON THE EFFICACY OF CAPACITY DEVELOPMENT*, *September 30*, 2005, Illinois' program has been implemented in two parts:

- First, all new public water supplies that became active after October 1, 1999, were
 required to complete a capacity development demonstration. Illinois adopted regulations
 to implement this requirement. Failure to meet this deadline would have resulted in a loss
 of up to 20 percent of the State Revolving Loan Fund monies allocated to Illinois each
 year.
- Second, Illinois was required to develop a Capacity Development Strategy by September 30, 2000. The purpose of this Strategy is to structure a work plan that Illinois will implement to ensure that existing public water supplies have the capacity to achieve compliance and continue to operate in compliance with all existing and future drinking water program standards and requirements. Failure to meet this deadline would have resulted in a loss of up to 20 percent of the State Revolving Loan Fund monies allocated to Illinois each year. The Illinois Capacity Development Strategy was approved by U.S. EPA on September 27, 2000.

This strategy has proven effective. As documented in **Appendix E**, none of these new systems have had significant compliance issues even though most would be considered small systems.

The Illinois DPH administers the NCPWS Capacity Development Program (see Appendix F, for a summary of new systems and compliance issues. This program is unique because these systems are not in the business of producing water for resale; therefore, the treatment and monitoring of the water system has not traditionally been a routine function of management. The water supply at these facilities is used for drinking, sanitation and, in some cases, manufacturing processes. Demonstrating capacity for these types of NCPWS is, for the most part, a small part of the overall management, budget and operating plan for a specific PWS. Illinois DPH uses existing field survey and visit opportunities to identify NCPWS which need or may benefit from capacity development assistance. However, Illinois DPH approaches the water supply compliance issues from a somewhat unique perspective of a side benefit activity rather than a primary activity and must work within the framework of the entire operation to best assist the supply in developing capacity. Central Office staff coordinates the dissemination of information and education of NCPWS personnel for all new or amended regulations and requirements. When capacity assistance is needed on-site, Central Office staff accompanies field staff or LHD staff to provide training or technical assistance. Additionally, Central Office Staff also perform a capacity review on all proposed new NTNCPWS. When capacity assistance is needed on-site, Central Office staff coordinate with Regional Office or LHD staff to provide training or technical assistance.

Again, the Illinois EPA and DPH would like to make special note of the leadership shown by Illinois associations, education institutions and

In 2018-19, the Illinois EPA contracted with the Illinois Rural Water Association and hired them as a service provider to conduct statewide small system capacity development.

operator groups in the development of Financial, Managerial and Technical Capacity. The Illinois EPA especially thanks the Illinois Rural Water Association for their partnership. The Illinois Rural Water Association routinely meets with the Illinois EPA to discuss emerging education needs in all three areas of capacity development. Additionally, the Illinois EPA is appreciative of the efforts of the Illinois Section of the American Water Works Association and the Illinois Potable Water Supply Operator's Association. All three Associations, as well as local

operator groups, routinely invite Illinois EPA staff to speak at their conferences (four separate multi-day annual conferences between the three Statewide Associations). These collaborations are highly effective in educating water supply officials. Over the reporting period, technical assistance has focused on revision to the Total Coliform Rule, revisions to operator regulations, revisions to state regulations (including, but not limited to Permit Regulations), *Legionella* and micro-biological control, lead in drinking water, water loss accounting, as well as a myriad of other regulatory concerns. Finally, the Illinois EPA expresses thanks to the efforts of the Southern Illinois University-Edwardsville's Environmental Resources Training Center. The Environmental Resources Training Center is unique to Illinois and their collaboration on the Operator Certification Program, including their hands-on operator training program and assistance in operator test preparation, is invaluable to the citizens of Illinois.

The following documentation provides the reporting criteria for the annual State Capacity Development Program Implementation Report as required by U.S. EPA through guidance from Cynthia Dougherty in her June 1, 2005, Memorandum. The Illinois EPA and Illinois DPH anticipate this information fulfills the annual reporting requirements for Illinois' approved strategy.

New Systems Program Annual Reporting Criteria -

- There have been no modifications to Illinois' legal authority to implement New System Programs.
- There have not been any modifications to Illinois' control points. ⁷
- The following data summarizes the Annual new system data for the Capacity Development Program.⁸

| Annual Report on New Systems Capacity Development Program January 1, 2019 – December 31, 2019 | | | | | | |
|---|---------------------------------------|--|--|--|--|--|
| Method(s) used to evaluate and verify program implementation | Construction and Operating Permits | | | | | |
| Number of proposed new CWS | 0 | | | | | |
| Number of proposed new Non-Transient Non-Community Water Supplies (NTNC PWS) | 8 | | | | | |
| Number of approved new CWS | 14 | | | | | |

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⁶ See *ILLINOIS ANNUAL REPORT ON THE EFFICACY OF CAPACITY DEVELOPMENT, September 30, 2005* at: https://www2.illinois.gov/epa/topics/drinking-water/field-operations/Pages/capacity-development.aspx. U.S. EPA believes this information will help identify whether States have maintained the necessary authority to implement the new systems program.

⁷ See ILLINOIS ANNUAL REPORT ON THE EFFICACY OF CAPACITY DEVELOPMENT, September 30, 2005. Each State's New Systems Program identified a set of Control Points, which is an integrated feature of a State's program. A control point identifies a place where the Primacy Agency (or other unit of government) can exercise its authority to ensure the demonstration of new system capacity. States should provide a discussion or a list that explains the modification(s) of control points for new systems, followed by an explanation of how and why the modification(s) have been identified. The explanation should include how the modification(s) is projected to affect the new systems program.

⁸ U.S. EPA believes that compilation of compliance data is intended to identify whether there are noncompliance patterns during the first three years of a new system's operation.

| Number of approved new NTNC PWS | 8 |
|--|-------------------|
| Number of new CWS (commenced operation after October 1, 1999) | 148 |
| Number of new CWS (commenced operation after October 1, 2003) | 111 ⁹ |
| Number of CWS that commenced operation after October 1, 2003 that have | |
| gone inactive | 6 |
| Number of new CWS activated since October 1, 2003 considered to be in | |
| "significant non-compliance ¹⁰ " | 0 |
| Number of new NTNC PWS (commenced operation after October 1, 1999) | 198 |
| Number of new NTNC PWS (commenced operation after January 1, 2004) | 158 ¹¹ |
| Number of new NTNC PWS activated since January 1, 2004 considered to in | |
| "significant non-compliance" | 13 |
| Number of new CWS that are not in compliance, | |
| Reason for non-compliance: | 0 |
| Number of new NTNC PWS that are not in compliance, | |
| (These are mostly Nitrate, Phase II/V and Lead and Copper Rule (LCR) | |
| monitoring violations. Owner/Operators are generally new to the Drinking | |
| Water Regulations and have difficulty keeping up with the testing schedule and | |
| their other job duties.) | 63 |

Existing System Strategy -

- There have been no modifications to Illinois' existing systems strategy. Both the Illinois EPA and the Illinois DPH utilized existing programs, tools and activities as described in the ILLINOIS ANNUAL REPORT ON THE EFFICACY OF CAPACITY DEVELOPMENT, September 30, 2005.
- Illinois has continued to identify systems in need of technical, financial and managerial capacity development, as described in the *ILLINOIS ANNUAL REPORT ON THE EFFICACY OF CAPACITY DEVELOPMENT*, *September 30*, 2005, and its Attachments 3 and 4.
- Over the reporting period, Illinois EPA conducted over 420 Engineering Evaluations (Sanitary Surveys) at CWS and Illinois DPH conducted approximately 215 sanitary surveys at NTNC PWS. Public water system capacity concerns were evaluated during each of these evaluations. The Illinois EPA and DPH find that each system must be handled on an individual basis and no common trends not previously noted were identified.
- During the reporting period, no revisions or modifications to the implementation strategy for existing system strategy were made.
- The Illinois EPA will continue the current capacity outreach process in Illinois. The Illinois Rural Water Association (IRWA) contractor hired in 2018, provides the Illinois EPA with statewide small systems technical assistance set-aside quarterly reports. The reports include the detailed technical, managerial, and financial capacity work completed. The contractor meets with Illinois EPA staff to determine potential public water supply systems in need of assistance. The contractor assists the small systems' staff, owners,

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⁹ U.S. EPA has requested the list provided in Appendix E to this Report.

¹⁰ For the purpose of this report significant noncompliance corresponds to an Enforcement Tracking Tool score greater than or equal to 11.

¹¹ U.S. EPA has requested the list provided in Appendix F to this Report.

operators, clerks, boards and council members with system improvements, loans and grant applications, rate setting, and technical, managerial, and financial matters. Generally, groups like the Illinois Rural Water Association, Illinois Section of the American Water Works Association, Illinois Potable Water Supply Operators Association and local operator associations request technical assistance from the Illinois EPA. These requests come in throughout the year and generally focus on areas of concern as they arise or are perceived by the particular interest group. For the Illinois EPA to track this level of detail, we would need to institute a separate tracking system with no purpose other than reporting. At this time, the Illinois EPA-DPWS does not have the resources to institute such a process and is not convinced that doing so would be in the best interest of the State.

- While the Illinois EPA will continue to evaluate the use of various programs to assist CWS in developing capacity, the Illinois EPA will continue to work with the training providers mentioned in the previous bullet on these programs, including the Check Up Program for Small Systems. In the future, Illinois training providers may modify the Check Up Program for Small Systems to accommodate the very small systems that struggle most to achieve compliance.
- The Illinois EPA and the Public Water Supply Operator Advisory Board remain concerned that the technical capacity of water systems will be affected by staff attrition resulting from the aging workforce in Illinois. In light of this impending issue, the Illinois EPA has devoted a large resource investment in working with the Board. This effort has resulted in the statutory changes described in the Operator Certification Program description within this chapter.
- In previous program reviews, U.S. EPA has noted that Illinois' Capacity Development Program would benefit from an enhancement to address these financial and managerial capacity issues such as promoting more realistic user rates and budget planning for current and long-term needs. While the Illinois EPA agrees with this conceptually, it can be difficult influencing water supplies with respect to financial capacity. Further, very few water systems are subject to statutory rate setting in Illinois (only privately-owned utilities are subject to the Illinois Commerce Commission). Therefore, other than encouraging water systems to act progressively, the Illinois EPA has no authority to require actions beyond our current program.

Cross-Connection Control Program

The DPWS evaluates community water supply cross-connection control programs during routine engineering evaluations of each system. A viable program consists of an ordinance, an ongoing survey of the distribution system service connections, identification of at-risk service connections, mitigation of recognized risks via a plumber/CCCDI, and documentation.

In terms of corrective action, if a system does not have an ordinance, has no information on file relative to a survey of its distribution system, cannot produce reports on reduced pressure backflow devices, or cannot show that devices within its facility have been tested annually, it is safe to say that the system does not have an active and effective program. These situations are normally cited in either an NCA letter or a VN to the water supply as violation(s) of 35 Ill. Adm. Code 607.104(a) and (b). While the Illinois EPA does not track

To verify the effectiveness of each water system's Cross-Connection Control Program the DPWS FOS normally evaluates the following questions:

- 1. Does the system have a Cross-Connection Control Ordinance?
- 2. Does the system survey the service connections on its distribution system and at what frequency?
- 3. Does the system receive reduced pressure backflow preventer annual test reports?
- 4. Does the system have an adequate tracking procedure whereby test reports and high-risk service connections are tracked?
- 5. Does the system ensure that devices within its water treatment facility are properly tested on an annual basis?
- 6. Are there any locations within the water treatment facility that should have backflow protection that do not?

VNs to the level of specificity needed to quantitatively evaluate CWS compliance with this requirement, the Illinois EPA can say that compliance has increase dramatically over the past decade and the program is reaching a level of maturity where almost 100 percent of CWS have ordinances or water use agreements and evaluate high risk activities. The bulk of the noncompliance occurs in tracking routine surveillance of the distribution system. The Illinois EPA believes that these activities are even seeing great improvements.

Groundwater and Source Water Protection Program

Illinois Reports biennially on Groundwater Protection Activities. See the Illinois Groundwater Protection Act Report. https://www2.illinois.gov/epa/topics/water-quality/groundwater/wellhead-protection/Documents/2020_01_07%20Final%20IGPA%20Report.pdf published in 2019 for the period of 2018-2019. The next IGPA Biennial Report will be due at the end of 2020. Source water protection metrics are included in SDWIS for U.S. EPA to review. For the calendar year 2019, the Illinois EPA still has 49.7 percent (869 of 1,749) of CWS that have minimized risks to public health through substantial implementation of source water protection programs. Additionally, 72.5 percent (8,706,870 of 12,001,944) of the population served by community water systems have source water that has been substantially protected by their respective water systems. In August of 2019, Part 604 of the Board regulations require CWS to prepare source water protection plans that must be approved by the Illinois EPA. We anticipate, that we increase the percent of CWS that have minimized risks to public health through substantial implementation of source water protection programs.

Permitting Program

The following table summarizes the DPWS permit activity for Calendar Year 2019. It is noteworthy that all permits were issued well within statutory deadlines.

| Permits Issued by Illinois EPA's Division of Public Water Supplies for CWS | | | | | | | | | | |
|--|------------|-------------------------------|------------------------------|--------------------------|-------------------|---------------------------------------|--|--|--|--|
| Permit Types | Deadlines | Public Hearing Required | Public Notice Required | Calendar Year 2018 | | | | | | |
| | | | | Applications Received | Permits Issued | Approx. Turn-around time (days) | | | | |
| Construction permits | 45/90 Days | No | No | 1251 | 1151 | 21 | | | | |
| Operating permits | 90 Days | No | No | 1001 | 1051 | 3 | | | | |
| Emergency permits | n/a | No | No | 25 | 27 | 11 | | | | |
| As-built approvals | none | No | No | 35 | 28 | 22 | | | | |
| Aquatic Pesticide/ Algaecide | 90 Days | No | No | 5 | 5 | 24 | | | | |

The PS has also taken the following actions in response to the need for enhanced health protection from lead in drinking water:

- The PS now requires three, six-month rounds of initial lead and copper monitoring following an operating permit that involves a change in source or significant change in treatment. This is an increase above the current requirement of two rounds.
- The PS began placing a special condition on all water main replacement permits that require notice to each service connection regarding precautions that can be taken to minimize the effects of "disturbances" to water consumers.
- All new corrosion control evaluations will have enhanced project tracking.

Future Directions:

Illinois Environmental Protection Agency

Priorities for 2020

Division of Public Water Supplies (DPWS) Manager's Initiatives

The focus is on implementing the to-be-adopted rules for CWS permitting (Part 602) and for design, operation and maintenance of CWS (Part 604). The Illinois EPA believes our effort to streamline the PWS regulations will be beneficial for both the Illinois EPA and regulated community- easy to understand and implement.:

The Illinois EPA is:

- Work on filling personell resource deficiencies in DPWS and DPH in response to the U.S. EPA/Illinois EPA Corrective Action Plan.
- Working with U.S. EPA to finalize the streamlining of IPCB drinking water regulations (Part 611) to further streamline and enhance drinking water protection in Illinois.

- Working to repeal provisions of Parts 651, 653 and 654 that were replaced with newly adopted Parts 602 and 604.
- Revise a strategy for Capacity Development pursuant AWIA Section 2012 amendments to the SDWA.
- Prepare Capacity Development Governor's Report.
- Utilizing GS and DPWS staff to provide support for Illinois EPA's proposed regulations specific to coal combustion residue ("CCR" or "coal ash") impoundments. The Coal Ash Pollution Prevention Act or Public Act (Public Act 1010-071), which became effective on July 1, 2019, requires the Illinois EPA to propose regulations to the Board by March 31, 2020 and requires the Board to adopt regulations by March 31, 2021.
- Implementing the CCR fee structure and regulatory program.
- Working to control of bacteria in the distribution system.
- The DPWS will be investing resources in developing programs that address small and disadvantaged drinking water systems, workforce development, and asset management.
- Continue to support various Bureau/Illinois EPA groundwater related compliance investigations including, but not limited to, assisting in the enforcement process; preparation of compliance commitment agreements; providing testimony and assisting in the development of consent decrees or agreed upon orders by the court.
- The DPWS will continue to support and review legislative proposals to enhance drinking water protection in Illinois. Additionally, the DPWS will continue to support statutorily established committees, councils and boards. These include, but are not limited to, the ICCG, the GAC, four Regional Groundwater Protection Committees and the PWS Operator's Advisory Board.
- During 2020, the Illinois EPA will continue to implement the expanded HAB monitoring effort. Additional reservoirs used as PWS sources will be assessed by the Ambient Lake Monitoring Program of the BOW. Illinois EPA continues to participate and support the efforts of the Illinois' Nutrient Loss Reduction Strategy. When fully developed and implemented, the strategy has the potential to reduce HAB impacts from nutrients to source water protection areas for surface water systems in the state. Further, as total microcystins and cylindrospermopsin are detected as part of Illinois EPA monitoring efforts, DPWS/FOS staff have provided systems with technical assistance on appropriate treatment evaluation/optimization alternatives. If monitoring results indicate that a system has met the criteria for issuing a health advisory, the Illinois EPA will encourage systems to implement EPA's cyanotoxin health advisory for drinking water.
- Illinois EPA and DPH will work with U.S. EPA cooperatively on the NCI.

Field Operations Section

FOS helps achieve the DPWS key outcome measure of *percent population served with good quality drinking water from CWS*, in addition to the output measure of *conduct engineering evaluations every 3 years at CWS*. DPWS has added four additional staff members within the past two calendar years, including one staff member in each of the Springfield, Champaign, Elgin, and Rockford offices. As a result, FOS has gradually and consistently increased the number of sanitary surveys conducted each year, in addition to providing technical guidance to community water supplies, responding to emergency and complaint-related issues, assisting with enforcement activities, and assisting community water supplies with regard to compliance maintenance.

The following activities outline the priorities for the Illinois EPA for Calendar Year 2019:

Implement Corrective Action Plan to address the 2017 U.S. EPA Joint File Review and Enforcement Verification:

- Adding an additional engineer to the Illinois EPA Elgin Regional Office to implement sanitary surveys;
- Two engineers hired for the Illinois EPA Regional Offices in Champaign and Springfield to assist with conducting sanitary surveys;
- Place added priority on increasing the number of inspections to achieve goals and provide emergency and technical assistance to water systems as necessary to maintain Illinois' high public health protection goals.

2020 Objectives: The FOS will also work to maintain current inspection goals and provide emergency and technical assistance to CWS as necessary. Additionally, FOS will continue to support other BOW and DPWS programs including, but not limited to the Operator Certification, Capacity Development and Cross-Connection Control Programs.

As part of routine engineering evaluations/sanitary surveys of water systems, field engineers will begin initiating a process to verify that the water quality parameter ranges are being met on a daily basis. The Illinois EPA recognizes that water treatment operation is just as important as design when it comes to maintaining water quality. Additionally, inspectors will begin evaluating water service line materials inventories in preparation for revisions to the Lead and Copper Rule and advised by U.S. EPA. Inspectors have initiated reviews of Nitrification Action Plans that are now required of community water supplies that do not carry free chlorine residuals. Finally, FOS is tasked with completing the 2020 Drinking Water Infrastructure Needs Survey and Assessment during the 2020 calendar year.

Compliance Assurance Section

The CAS helps achieve the Division's key outcome measure of *percent population served with good quality drinking water from CWS* and *percent of CWS serving good quality drinking water*. The CAS has necessarily used a strategic planning approach for implementation of programs for the past 10 years. This process includes cross-training of all staff for rule implementation and programmatic corrective actions. Additionally, the CAS has assisted the Division Manager since the Cross-Connection Control and Capacity Development Program Coordinator vacancy has existed for an extended time.

Continue to use, support and improve technology, such as SDWIS/STATE, to track the efficacy of water treatment facilities in protecting water consumers.

<u>2020 Objectives</u>: The CAS will continue integration of the Operator Certification, Capacity Development and Cross-Connection Control Programs into base activities to optimize staff resources. Additionally, CAS is in the process of working with IT staff on several data systems including the operator certification data system, updating a web service to track operator certification status, the transition of the existing state and federal SDWIS to SDWIS Prime (supported by the "cloud") and local data systems.

In response to the concern for lead in drinking water, the CAS is evaluating processes to:

- Follow up with water supplies on all individual user results above 15 ug/L and encourage either lead service line replacement, replacement of premise plumbing that contains lead, or improved corrosion control treatment at the water treatment plant; and
- Working with the third year of CWS that provided updates to their lead service line inventory
 pursuant to Section 17.11 of the Act. https://www2.illinois.gov/epa/topics/drinking-water/public-water-users/Pages/lead-service-line-information.aspx.

Illinois EPA continues to work with the systems that have not submitted inventories.

The Act was amended to include <u>Section 17.11</u> in January 2017 to help respond to lead in drinking water. For Lead Service Lines (LSLs), it directs utilities to: 1) create a comprehensive materials service line inventory, and 2) provide notice to occupants of residences potentially affected by construction or repair work on water mains, LSLs, or water meters.

Under Section 17.11, CWSs must provide the Illinois EPA with a "water distribution system material inventory" on April 15 of each year, starting in 2018, until the inventory is complete. Illinois EPA also <u>directs CWSs</u> to post their materials inventory, including locations of LSLs, on their public website. If the CWS does not have a public website, Illinois EPA will post their inventory data for them; however, this will not include location information. The inventory must identify the:

- Total number of service lines within or connected to the distribution system, including privately owned service lines;
- Number of all known LSLs within or connected to the distribution system, including privately owned LSLs; and
- Number of LSLs that were added to the inventory after the previous year's submission.

As of June 25, 2020 1739 CWSs have <u>reported to the Illinois EPA</u> on 3.80 million service lines (10 CWSs have not yet reported). About 18 percent of the total service lines were reported as lead and 20 percent were reported as unknown. Illinois has between 677,359 and 1.45 million lead pipes (including unknowns). Illinois EPA published <u>an online tool</u> to enable customers to determine service line material types in their CWSs.

Utilities must follow specific requirements when performing construction or repair work on a water main, service line or a water meter. With limited exceptions, they must provide individual written notice to residents at least 14 days before work begins. The notice must warn potentially affected residents of the dangers of lead and what practices they should follow to prevent the consumption of any lead in drinking water. The recommended practices must include flushing of water lines during and after the completion of the repair or replacement work and cleaning of faucet aerator screens.

If the utility serves a significant portion of non-English speaking consumers, the notification must contain information in the appropriate language and provide contact information to request assistance. For multi-dwelling buildings, the notice may be posted on the primary entrance to the dwelling.

In addition, Illinois requires sellers to <u>disclose to homebuyers</u> if they are "aware of unsafe concentrations of or unsafe conditions related to lead paint, lead water pipes, lead plumbing pipes, or lead in the soil on the premises.

In 2019, two additional material categories (Ductile/Cast Iron or Transite) were added to the reporting portal to account for large diameter service lines or water main reporting for wholesale systems. Water systems were instructed to report these material types as "unknown" for the 2018 reporting cycle. This future reporting modification will reduce this category in the material inventory by approximately 10,000 services. Additionally, several water systems indicated they will significantly reduce the unknown category in 2019 through confirmatory work being conducted in 2018. Finally, water systems have indicated they do not have lead service lines; however, they did not track the customer owned portion of service line replacements although they know lead was not used (e.g., local knowledge such as the age of construction relative to the lead ban in 1988). This resulted in reporting the service line as unknown (which may overestimate the amount of lead present). Therefore, the Illinois EPA has split the Unknown Material class into two classes in 2019 (e.g., Unknown and Unknown - Not Lead.)

Permit Section

The PS continues to assist the Division in achieving the key outcome measure of *percent population served with good quality drinking water from CWS*. Because of the current economic downturn, modernization of the Permit Database and streamlining strategies, the PS has been able to meet current workloads. This trend seems to be reversing itself and workloads are increasing.

The PS will continue to initiate efforts to enhance the technical, financial and managerial capacity of public water supplies. This priority includes ensuring that the Permitting, Operator Certification, Cross-Connection Control and Source Water Protection Programs remain high priorities in protecting public health and ensuring water system viability. Additionally, the Illinois EPA will continue to support a contractual agreement to work with community water supplies on capacity development using the Drinking Water State Revolving Fund Capitalization Set-aside Grant.

<u>2020 Objectives</u>: The PS will continue to evaluate the business processes to further streamline and automate certain functions to maintain current work activities to issue construction and operating permits. Furthermore, they will continue to support other BOW and DPWS programs including, but not limited to the Operator Certification, Capacity Development and Cross-Connection Control Programs.

In response to the concern for lead in drinking water, the PS is evaluating processes to:

- Continue a review of corrosion control treatment practices at water systems with highest vulnerability to lead corrosion and with greatest populations served;
- Initiate an audit of lead sampling design (Tier I sites): The Illinois EPA intends to begin a process to audit sites as resources allow. The Illinois EPA is currently considering use of Geographical Information System technology to aid in this process;
- Illinois Agencies issued a press release supporting point of use filters to reduce lead exposure: https://www2.illinois.gov/Pages/news-item.aspx?ReleaseID=20091.

Bureau of Water Infrastructure and Financial Assistance Section

Drinking Water - \$250 Million Average Annual Funding

- Develop and implement a revised project prioritization scoring process to use for State FY2021. Illinois EPA anticipates adoption of the revised rule before February 2020, which will allow for the development of the FY2021 Project Priority List and Intended Use Plan based on the revised scoring system;
- Investigate ways to incentivize development of the technical, managerial, and financial capability of public water system owners to maintain compliance with the state and federal SDWA requirements;
- Looking into ways to incentivize the consolidation and/or regionalization of struggling/ failing systems so that these systems may take advantage of economies of scale available to larger water systems;
- Principal Forgiveness for Lead Service Line Replacement (LSLR), \$8.3 million annually. To qualify, a community water system must document lead service lines are connected to its system. The LSLR principal forgiveness will be available up to a maximum of \$2 million in FY2020 for communities with a median household income of less than 70 percent of the state average. For other communities, principal forgiveness will be available up to a maximum of \$1 million in FY2020. LSLR principal forgiveness will be available for FY2020 recipients until the allotted funds are expended;
- Small grants program for small and disadvantaged communities focus on eliminating underserved systems;
- Reduced Interest Rates and Principal Forgiveness for Small/Economically Disadvantaged Communities; and
- Investigating ways to provide financial assistance with planning efforts.

Groundwater Section (includes Source Water Protection)

As with the FOS and PS, the GWS assists the Division in achieving the key outcome measure of *percent population served with good quality drinking water from CWS*, in addition to the output measures associated with *enhancing source water protection programs at CWS*.

For the calendar year 2020, we anticipate that we will maintain a measure of 50 percent of CWS that have minimized risks to public health through substantial implementation of source water protection programs.

The GWS continues to use the strategic planning approach for implementation of various program activities. These strategic plans are developed with input from the Interagency Coordinating Committee on Groundwater (ICCG), Groundwater Advisory Council (GAC), and Priority Groundwater Protection Planning Committees. Starting with the *Illinois Groundwater Protection Act Biennial Report* published 1998, the DPWS began setting objectives and implementing tactical plans based on a self-assessment of metrics.

The GWS will continue to conduct the prevention-oriented programs to protect groundwater required by the Illinois Groundwater and Environmental Protection Acts and recommended by the ICCG, GAC, and the Priority Groundwater Protection Planning Committees.

The GWS will continue to support protection of the Mahomet Aquifer.

Per and Polyfluoroalkyl Substances (PFAS)

Illinois EPA is working on a PFAS strategy. One of the first steps in Illinois EPA's draft PFAS strategy is to determine the prevalence of 18 PFAS contaminants in 1756 community water supplies:

- This study will focus on sampling the entry point (1453) to the distribution system representing 1756 CWS
- The sampling of wells and intakes will start in 2020, and will take a year to finish;
- Currently, there is a bid in place for analytical laboratory services to analyze the samples collected by Illinois EPA staff;
- Illinois EPA is also working on a comprehensive website for PFAS;
- Illinois EPA will be working with community water supplies where PFOS and PFOA
 exceed the appropriate screening levels to develop public notification and treatment if
 necessary; and
- Illinois EPA will also be proposing a combined new groundwater quality standard for PFAS to Part 620.
- Illinois EPA will develop an outline to develop PFAS MCLs.

<u>2020 Objectives</u>: The GWS will continue the measured outcome metric of *good quality groundwater*, from previous planning cycles. Further, the Section will continue groundwater monitoring efforts in 2019 with emphasis on assessment of nitrate contamination in groundwater. The GWS will also continue support of BOW programs including, but not limited to the Mine Pollution Control Program and Water Pollution Control Permit Program. See the IGPA Report.

Administrative Support Unit

The role of this small unit cannot be underestimated. The group assists all aspects of the Division. Through attrition, the Division is down to one full time staff. At this time, the Division is unsure how this functionality will continue. The Bureau has initiated a pooled support system to deal with this issue. The Bureau has also hired summer student workers to assist with administrative functions.

<u>2020 Objectives</u>: The DPWS will continue to work with the new pooled resources approach and work towards adding an office associate.

Illinois Department of Public Health

The Illinois DPH continues to administer the NCPWS Program, protecting public health of the 486,901 population served by NCPWS. Illinois DPH continues doing program work in the Central Office with only two full time employees. These employees do Plan Review, Federal Reporting, Compliance Assurance for all Non-Transient Systems with IOCs, VOCs, SOCs, Lead and Copper Rule, Arsenic, Disinfection/ Disinfection Byproducts Rule and Surface Water Rule (T and NT). Additional duties include SDWIS/STATE administration including data migration and compliance decision support checks. These two positions further provide training of Local Health Department staff, adopt new rules and program policies.

2020 Objectives:

Resources: Two vacancies continue to exist in the NCPWS Program. Major progress has been accomplished as these positions were approved to be filled and were posted for hiring. However, the hiring process was put on hold due to COVID-19 and the Division of Environmental Health awaits the hold to be lifted. The Program was able to get some assistance again in 2019 by finding help from other employees within the Department to perform some duties, but the Program cannot be properly administered long-term without completing the filling of these two vacancies. This would constitute a fully staffed program under current established positions.

Reporting of Coliform and Nitrate Violations: As noted in on-going discussions with U.S. EPA, reporting of coliform and nitrate violations fell off in 2012 and 2013 due to loss of a staff position. However, some gains were made in 2014 and 2015 with the help of some contractor support and reprioritization of duties. Efforts to restore contractor help were again successful for 2016 thru 2017 and more gains were made towards closing the gap of complete reporting. However, contractor support was no longer available in 2018 and further gains were not made. In late 2019, IDPH employee, Mike Crumly who formerly headed IEPA's Compliance Assurance Section was "loaned" to the program. Mr. Crumly was able to help the program "catch up" in getting all Coliform sampling data entered into the SDWIS/State database by early 2020. This was another big gain; however 2019 compliance determinations and violation reporting could still not be completed.

In 2016, the upgrade to SDWIS/State version 3.33 was completed and in 2017, the following database initiatives were completed: 1. The SDWIS Bridge Module for RTCR and GW Rule compliance determinations was successfully set-up and tested; 2. The majority of Illinois private Labs began reporting sample data with Electronic files for SDWIS migration; and 3. the Illinois DPH lab successfully set-up and ran test files in the "lab to state" format for migration into SDWIS. After many delays, in May 2020, the Illinois DPH lab has begun to provide production files in the "lab to state" format. This is another big step forward that will assist Illinois DPH in managing Coliform data and reporting violation in 2020.

2020 Objectives: (Cont'd)

Program Highlight: Nitrate compliance determinations were completed for 2017, 2018 and again in 2019. Complete 2019 Nitrate violation data will be reported with the 2nd Quarter 2020 federal report. This effort is resource intensive as Program staff has to work closely with RO and LHD staff to track and get Nitrate results submitted. In addition, the Nitrate monitoring compliance rate is very low – around 70%. This is due in large part to the Illinois DPH lab discontinuing free Nitrate analyses after 2015 and the lack of resources to make a compliance push on these systems. Illinois DPH will continue to work with ROs and LHDs to bring these systems into compliance in 2020. As mentioned under Resources above, the securing of two new full-time employees, once fully trained will contribute to make a major compliance push on Nitrate Monitoring by the end of 2020.

Despite the initiatives that have been completed, Illinois DPH was unable to perform complete compliance determination in SDWIS and reporting of RTCR and GW Rule violations again in 2019. In addition to full-time equivalent limitations, as mentioned above, Illinois DPH was no longer able to bring in contractor support with SDWIS experience as was done in previous years. Other stressors that prevented this work were increased reviews of Legionella prevention via secondary disinfection at healthcare facilities, implementation of seasonal start-up procedures and the effort to eliminate Lead Levels to Non-Detect beyond the LCR requirements at Non-Transient, Non-Community Schools and Daycares. These efforts detracted from completing 2019 RTCR and GW Rule compliance determination and violation reporting.

Illinois DPH will make every effort to run RTCR and GW Rule compliance determination in SDWIS/State in 2020 so that complete reporting can be achieved. Illinois DPH hopes to accomplish this with the following initiatives: 1. Provide additional resources to the extent possible, hopefully including one FTE dedicated to RTCR and GW Rule compliance and reporting. 2. Fully implement SDWIS modules for RTCR and GW Rule which are properly installed and working; 3. Process 2020 Illinois DPH lab data using "lab to state" Coliform files for migration into SDWIS in full production mode; 4. Continue re-assigning some priorities within Illinois DPH to provide some additional help to Program Staff. Program Highlight: Illinois DPH is pleased to report as mentioned above, with the help of Mike Crumly, complete RTCR and GW Rule compliance determination and violation reporting has been performed for 2020 thru May. This is a major program accomplishment.

It should be noted Illinois DPH ROs and LHDs are monitoring for compliance and protecting public health when confirmed Coliform contamination is present at Non-Community Public Water Supplies. Central Office program staff have not had the resources over the last eight years to run the compliance determination through SDWIS/State to verify the work performed in the field and completely report all violations, particularly all monitoring violations. However as noted public health is being protected.

Revised Total Coliform Rule Adoption: The Illinois DPH is adopting an alternative RTCR for NCPWS in 77 Ill. Admin. Code Part 900 of the Public Health Rules. Illinois DPH worked closely with U.S. EPA Region V program staff on this proposed rule. This rule is more stringent than the federal rule and makes more efficient use of State and LHD resources. Along with rule adoption, program policies and reporting forms are being revised and updated to provide more consistency in the NCPWS Program. Illinois DPH made changes to the draft rule requested by U.S. EPA Region V and Headquarters. Illinois DPH Draft 900 rules have been thru the 1st 45-day notice period. The Division of Legal Services is preparing the draft 900 rules for submittal to the Joint Committee on Administrative Rules (JCAR) for 2nd notice and adoption. Illinois DPH is very hopeful the rule changes will be adopted before the end of 2020. Currently Illinois NCPWS are subject to the federal RTCR as adopted in 35 Ill. Admin. Code Part 611 of the Illinois Pollution Control Board Rules until the Part 900 rules are adopted.

2020 Objectives: (Cont'd)

Lead and Copper Rule/School Daycare Response: The Illinois DPH conducts a thorough review of sample results at NTNC PWS with special emphasis on schools and daycares. The Illinois DPH reviewed and revised sample site selection criteria and sampling protocol in 2016 to ensure sample site locations represent the highest level of health protection based on the criteria of human consumption and "worst case" risk for lead leaching. This was fully implemented in 2017 and all Lead and Copper sampling are now conducted following the revised sample site collection criteria and sampling protocol. Note: Reporting of ALE information should be more timely if dedicated resources are gained for RTCR / GWR compliance and reporting. Currently, NTNC school/daycare Lead ALE reporting is generally on time. Non-school/daycare Lead ALE reporting is lagging. This reporting lag will be eliminated with the addition of the two new full-time positions that are being added to the program. In addition, Illinois DPH has a lead role in implementing the new Lead in Water School Law which requires all Illinois Schools/Daycares to mitigate Lead in Water. Under this law, the Non-Community Program is working with the Plumbing and Water Quality Program to require all schools and daycares to mitigate any lead levels at consumption sites (drinking/food preparation) to Non-Detection.

<u>Legionella Response</u>: Legionella response and control are a critical priority for Illinois DPH programs. The concern with preventing a Legionella outbreak is prompting many healthcare facilities in Illinois to install secondary disinfection systems. Illinois DPH is regulating these facilities as Non-Transient Non-Community Public Water Systems. **This is another water safety issue the Non-Community Program is coordinating with Plumbing and Water Quality Program**. Review of proposals at healthcare and other facilities proposing secondary disinfection to meet recognized construction and operational standards, while also providing effective control of Legionella Bacteria will continue to be a critical priority in 2020.

Appendix A

FEDERAL FISCAL YEAR (FFY) 2020 ILLINOIS EPA PUBLIC WATER SYSTEM SUPERVISION (PWSS) PROGRAM GRANT WORK PLAN TO FULFILL PRIMARY ENFORCEMENT AUTHORITY

October 1, 2019 through September 30, 2020

Illinois EPA has primacy for the Illinois Public Water System Supervision (PWSS) program. However, Illinois EPA only directly administers PWSS for community water supply systems and the Illinois Department of Public Health (IDPH) has the responsibility for non-community water supply systems under a Memorandum of Understanding (MOU) with Illinois EPA. U.S. EPA Region 5 provides PWSS grant funds exclusively to Illinois EPA as the primacy agency. Under the MOU with IDPH, Illinois EPA provides funding to the IDPH Drinking Water Program.

Region 5 provided FY 2020 PWSS program work plan guidance to the state drinking water program directors on May 28, 2019. For Illinois, the annual PWSS grant workplan includes state-specific priorities and core program activities for both the Illinois EPA's Community Water Supply (CWS) Program and the IDPH Non-Community Water System (NCWS) Program.

EPA Strategic Plan: This continuing program grant is consistent with U.S. EPA's Strategic Plan Goal 2: Clean and Safe Water, which calls for protecting public health by providing safe drinking water. Table 1 includes the projected measures for Illinois in FY 2020. Many of the grant work plan activities contribute to the goal of assuring that people served by public water systems (PWSs) receive drinking water that meets all applicable standards through effective treatment and source water protection. Continuing program implementation includes adopting rules at least as stringent as federal regulations, providing assistance to PWSs on regulatory requirements, conducting sanitary surveys, ensuring that monitoring and follow-up is conducted, and enforcing regulations. The Region will also oversee activity commitments under the Illinois Program Review Corrective Action Plan developed as a result of the 2018 Program Review.

States which meet the primacy requirements under 40 C.F.R. Part 142, are the primary regulators of drinking water systems in their states. U.S. EPA provides oversight of the implementation of state programs. Region 5 works with each primacy state to develop an annual work plan¹² that promotes collaborative inter-agency program planning and implementation as well as a clear understanding of both state and U.S. EPA commitments. In addition, Region 5 periodically evaluates the implementation and enforcement of public drinking water standards at a programmatic level in all primacy states. Such a program review includes collection, analysis and interpretation of data, with recommendations by U.S. EPA to improve the state drinking water program's effectiveness.

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¹² In addition to the annual workplan, the state needs to submit the required grant application materials, including the appropriate application forms, a full budget including match funding, a budget narrative, and the appropriate certifications, as described in statutes (i.e., CFR Part 35) and EPA guidance, as found at https://www.epa.gov/grants/epa-grants-policy-resources.

Joint Priorities: Illinois EPA and Region 5 have identified the following Joint Priorities for FY2020-2021:

Drinking Water Primacy Agency Staffing Levels: Ensure Illinois EPA's PWSS Primacy Program maintains adequate numbers of staff to effectively oversee all PWSs in IL. Illinois EPA implements the PWSS program for community water supply wells and ensures primacy requirements are met and adequate staff are available for the non-community program administered by the IDPH. Over the period covered by this agreement, the Illinois EPA-Bureau of Water, with support from U.S. EPA Region 5 GWDWB, will develop a strategy to maintain a baseline core of individuals who have the technical expertise needed to implement PWSS programs, particularly for the non-community program. U.S. EPA and Illinois EPA will meet at least quarterly to discuss the progress of hiring new staff as well as the primacy agency's plan to maintain the baseline level of staff over the next five years.

Drinking Water Technical Assistance: U.S. EPA will provide training and technical assistance related to lead in drinking water issues.

Drinking Water System risks from Harmful Algal Bloom (HAB) toxins: Illinois EPA and U.S. EPA will coordinate activities to assist water systems in evaluating risks from Harmful Algal Bloom (HAB) toxins. Illinois EPA has implemented a HAB monitoring strategy that includes evaluating toxin break-through of the water treatment process.

- ➤ In FFY 2020-2021, Illinois EPA will continue to monitor HAB toxins from up to 1/5 of the water supplies utilizing inland lakes as their source of water.
- ➤ U.S. EPA Region 5's Laboratory will assist Illinois EPA by conducting confirmatory analyses by GC/MS/MS of HAB toxins detected in screening analyses by the ELISA method for finished water samples collected from community water supplies.

Contacts:

- Rick Cobb, Acting Division of Public Water Supplies Manager, rick.cobb@illinois.gov, 217-782-1020
- Cynthia Meyer, U.S. EPA Region 5 Illinois State Program Manager, meyer.cynthia@epa.gov, 312-886-5868

Federal Funding Used:

Illinois EPA receives funding from the PWSS grant and provides about \$800,000 per year to IDPH under the MOU. Illinois EPA is also receiving funds under the DWSRF Small Systems Technical Assistance Set-Aside for FY2019 & FY2020 for the IL Rural Water Association to provide technical assistance and training to community water systems to more efficiently operate and maintain their systems. Illinois EPA also receives Clean Water Act Section 106 funds for groundwater protection and nutrient loss reduction strategy. Another Clean Water Act 106 grant will be used for a PFAS assessment and interpretive report and a multipurpose grant has been awarded to assist with PFAS follow-up assessment beyond the statistical occurrence monitoring.

1. Status of Rule Adoption and Implementation

- Illinois EPA has primacy for implementing the National Primary Drinking Water Regulations (NPDWRs) and implements the safe drinking water statutes and rules on which primacy is based.

- U.S. EPA and Illinois EPA expect a priority area of focus will continue to be the public health concerns related to Lead and Copper Rule (LCR) implementation. As such, Illinois EPA and IDPH will continue to provide information regarding lead action level exceedances annually to U.S. EPA Region 5.
- Specific state compliance targets are included in the Measures and Indicators, Table 1.
- U.S. EPA and Illinois EPA will conduct Fourth Unregulated Contaminant Monitoring Rule –
 Fourth Round (UCMR4) activities as described in the U.S. EPA/Illinois EPA UCMR
 Partnership Agreement.
- Illinois EPA and IDPH will update the status of FY2020 state activities conducted under the Program Review Corrective Action Plan at least semi-annually.
- U. S. EPA is working with Illinois EPA and IDPH to approve the Revised Total Coliform Rule (RTCR) regulations for primacy, particularly for the non-community program implementation.

2. Sanitary surveys

- Illinois EPA and IDPH will maintain technical expertise needed to perform sanitary surveys and ensure that sanitary surveys meet the content and frequency requirements specified by the regulations. During the FY 2020 grant year, Illinois EPA will complete 495 CWS sanitary surveys.
- During the FY 2020 grant year, IDPH will complete around 1800 sanitary surveys at all licensed recreational areas and all biennial surveys that are due to be completed.
- Illinois EPA and IDPH will also evaluate all eight elements and report status quarterly to SDWIS-FED. IDPH is fully implementing the appropriate tracking and reporting of the eight elements of a sanitary survey.
- U.S. EPA Region 5 will track state targets to conduct sanitary surveys for all system types within the federally required intervals.

3. Enforcement

- Illinois EPA and IDPH will maintain an adequate enforcement and compliance assistance program.
- Illinois EPA and IDPH will continue to address systems not in compliance with state rules, and report enforcement actions quarterly to U.S. EPA, via SDWIS-FED.
- Illinois EPA and IDPH will continue to refer noncompliant PWSs to U.S. EPA Region 5 for follow-up action, if appropriate.
- Illinois EPA will submit an Annual Compliance Report (ACR) to U.S. EPA annually by July 1st. The Illinois ACR is part of the Annual Consolidated Report.

4. Capacity Development, Small System Support, and DWSRF Program Integration

- Illinois EPA and IDPH will continue assisting existing PWSs in acquiring and maintaining technical, managerial and financial (TMF) capacity.

 Further, Illinois EPA and IDPH will require new PWSs to demonstrate they have the TMF
- capacity to operate in compliance with federal and state regulations.
- Illinois EPA will continue to submit the annual State Capacity Development Program Report as part of the Annual Consolidated Report on behalf of all water system types. This report includes a list of new PWSs within the last three years and indicates if they had an

- Enforcement Targeting Tool (ETT) score of 11 or greater. Also, the Capacity Development Governor's Report is due every 3 years and is due next by October 1, 2020.
- In FY2020, Illinois EPA and IDPH will continue with the specific activities planned to use PWSS grant funds for capacity development and small system support

5. Operator Certification and DWSRF Program Integration

- Illinois EPA and IDPH will continue to maintain regulations for the operation and maintenance of PWSs by properly certifying individuals.
- Illinois EPA will continue to report to U.S. EPA, on an annual basis, on how all water system types are implementing an Operator Certification Program that complies with the U.S. EPA's Operator Certification Guidelines, including the nine baseline standards.

6. Data Management and Reliability

- During FY20, Illinois EPA and IDPH will maintain adequate data management systems (and update them for new rules and new versions of FedRep) that track reporting requirements for all rules using SDWIS/State. Illinois EPA does not anticipate undertaking, however, any SDWIS-Prime. SDWIS Prime is now being called SDWIS Modernization. U.S. EPA contractors are reviewing to even see if any of SDWIS Prime is salvageable.
- Illinois EPA and IDPH will report in a timely manner to U.S. EPA actions and sample data quarterly and inventory data at least annually, in accordance with 40 CFR 142.15.
- Illinois EPA and IDPH will correct errors identified on the FedRep ODS error reports or identified by the Region in a timely manner. i.e., errors are corrected either in the quarter first identified by the Region or first appear on the SDWIS/Fed ODS error reports, or the next quarter.
- Illinois EPA and IDPH will implement the Corrective Action Plan once finalized to address all deficient violation reporting issues per the agreed upon schedule.
- Illinois EPA and IDPH have not yet completed programming to be able to fully report RTCR violations, including Level 1 and Level 2 assessment information, to SDWIS/State. Under the 2017 Illinois Joint Review and Enforcement Verification Correction Action Plan, IDPH has committed to assigning RTCR violations by October 1, 2020.
- Illinois IDPH will explore ways to expedite complete and accurate reporting to SDWIS/Fed.

7. Source Water Protection

- Illinois EPA will continue to report annually progress toward source water protection measures and targets for FY2020.

8. Laboratory Certification

- Illinois EPA and IDPH will continue to provide an adequate laboratory certification program
 for all regulated contaminants, at a minimum; to certify commercial laboratories at least once
 every three years; ensure capacity to analyze at the principal state laboratory or commercial
 labs all NPDWR parameters that are required to be sampled in the State; and maintain
 certification for the principal state labs.
- Illinois EPA and IDPH Lab Certification Programs will continue to submit annual questionnaires to U.S. EPA Region 5.

9. Security/America's Water Infrastructure Act (AWIA)

- States with Primacy are required to ensure that community water supplies (CWSs) maintain an adequate plan for the provision of safe drinking water under emergency circumstances.

Other Activities:

PFAS - Illinois is implementing a statistically based monitoring program with community and groundwater sources and surface water intakes. The funding for the statistical monitoring is from Illinois EPA (state funds), the USGS interpretative report is funded by the Clean Water Act 106 funds and any follow up will be paid for using Multi-Purpose Grant funds.

HABs –Illinois has implemented a HAB monitoring strategy that includes evaluating toxin break through from the water treatment process.

Environmental Justice – Illinois EPA is working with Cicero / Berwyn and University Park to address lead issues in drinking water.

Lead beyond the Federal rules – Illinois EPA is setting up a more robust monitoring schedule and requiring sequential monitoring. IDPH requires lead testing in all school and daycares and requires mitigation plans.

Table of FY20 National/Regional/State Measures

| Description | Name and | Target |
|--|---|---|
| | update schedule | |
| Number of CWSs out of compliance with health-based drinking water standards: U.S. EPA and the State will work collaboratively to implement the national measure and national compliance initiative (NCI) to reduce by 25%, by the end of FY 2022, the number of CWSs that are out of compliance with health-based standards. | USEPA | State FY20 target: 13 out of 1758 systems |
| Percent of CWSs and NCWSs with sanitary surveys within the past three or five years as | R5 - Updated by Region 5 in April and October | State FY20 targets: |
| required | | 79.5% CWSs |
| D. COWG 1 11 11 11 11 | D.C. CIVID D | 97.5% NCWSs |
| Percent of CWSs where risk to public health is minimized through source water protection | R5 SWP Program measure | State FY20 target: 50% CWS systems |
| Percent of population served by CWSs where risk to public health is minimized through source water protection | R5 SWP Program measure | State FY20 target: 72.6 % population served by CWS systems |
| All Rule Violation Completeness Reporting | R5 High Priority: Updated quarterly by Region 5 | State FY20 target: N/A for FY20; will establish a baseline |
| 1. % of <u>CWS systems</u> meeting all health- based standards | Shared Goals: Updated annually in April by Region 5 | CY19: ≥95% |
| 2. % of <u>population</u> of CWSs_meeting all health-based standards | Shared Goals: Updated annually in April by Region 5 | CY19: ≥95% |
| 3. % of <u>NTNCWSs</u> meeting all health-based standards | Shared Goals: Updated annually in April by Region 5 | CY19: ≥95% |
| 4. % of <u>TNCWSs</u> meeting all health-based standards | Shared Goals: Updated annually in April by Region 5 | CY19: ≥95% |
| 5. % of population served by CWSs with significant /major monitoring violations | Shared Goals: Updated annually in April by Region 5 | CY19: <5% |

| 6. % of <u>CWS systems</u> with <u>significant</u> | Shared Goals: Updated | CY19: <10% |
|---|-------------------------------|-------------------|
| /major monitoring violations (includes LCR | annually in April by Region 5 | |
| Type 66 violations) | | |
| 7. % of NTNCWSs with significant/major | Shared Goals: Updated | CY19: <5% |
| monitoring violations for <u>acute</u> health risks | annually in April by Region 5 | |
| 8. % of NTNCWSs with significant/major | Shared Goals: Updated | CY19: <10% |
| monitoring violations for <u>chronic</u> health risks | annually in April by Region 5 | |
| 9. % of <u>TNCWSs</u> with significant/major | Shared Goals: Updated | CY19: <10% |
| monitoring violations | annually in April by Region 5 | |

Appendix B Illinois EPA Annual Compliance Report Calendar Year **2019***

Summary Community Water Supplies
*Numbers Used from USEPA's CDX Reporting Services database

| Contaminant Code | Contaminant | Rule Family | Violation Category | # of Violations | # of Resolved Violations | # of CWS in Violation |
|---------------------|---------------------------------|-------------|--|-----------------|-----------------------------|--------------------------|
| 1005 | Arsenic | IOC | Monitoring and Reporting | 1 | 0 | 1 |
| 1005 | Arsenic | IOC | Maximum Contaminant Level Violation | 27 | 11 | 11 |
| 1041 | Nitrite | IOC | Monitoring and Reporting | 5 | 1 | 5 |
| 1041 | Nitrite | IOC | Maximum Contaminant Level Violation | 9 | 9 | 2 |
| 1040 | Nitrate | IOC | Monitoring and Reporting | 13 | 0 | 9 |
| 1040 | Nitrate | IOC | Maximum Contaminant Level Violation | 6 | 5 | 5 |
| 5000 | Lead and Copper Rule | LCR | Monitoring and Reporting | 76 | 44 | 68 |
| 5000 | Lead and Copper Rule | LCR | Treatment Technique Violation | 16 | 7 | 15 |
| 4006 | Combined Uranium | Rads | Monitoring and Reporting | 1 | 1 | 1 |
| 4010 | Combined Radium (-226 and -228) | Rads | Maximum Contaminant Level Violation | 16 | 2 | 6 |
| 4010 | Combined Radium (-226 and -228) | Rads | Monitoring and Reporting | 8 | 6 | 7 |
| 4000 | Adjusted Gross Alpha | Rads | Maximum Contaminant Level Violation | 1 | 0 | 1 |
| 0999 | Chlorine | St1 DBP | Maximum Residual Disinfectant Level | 1 | 1 | 1 |
| 0999 | Chlorine | St1 DBP | Monitoring and Reporting | 56 | 44 | 49 |
| 1006 | Chloramine | St1 DBP | Monitoring and Reporting | 15 | 9 | 11 |

| Contaminant Code Contaminant | | Rule Family | Violation Category | # of Violations | # of Resolved Violations | # of CWS in Violation |
|------------------------------|-----------------------------------|--------------------------------|--|-----------------|-----------------------------|--------------------------|
| 2920 | Total Organic Carbon | St1 DBP | Monitoring and Reporting | 2 | 0 | 1 |
| 2456 | Total Haloacetic Acids (HAA5) | St2 DBP | Maximum Contaminant Level Violation | 13 | 2 | 7 |
| 2456 | Total Haloacetic Acids (HAA5) | St2 DBP | Monitoring and Reporting | 25 | 7 | 25 |
| 2950 | TTHM | St2 DBP | Maximum Contaminant Level Violation | 18 | 7 | 11 |
| 2950 | TTHM | St2 DBP | Monitoring and Reporting | 27 | 9 | 27 |
| 3014 | E Coli | Groundwater Rule | Monitoring and Reporting | 1 | 1 | 1 |
| 8000 | Coliform (RTCR) | Revised Total Coliform Rule | Treatment Technique Violation | 1 | 1 | 1 |
| 8000 | Coliform (RTCR) | Revised Total Coliform Rule | Monitoring and Reporting | 63 | 41 | 48 |
| 8000 | Coliform (RTCR) Revised Coliform | | Maximum Contaminant Level Violation | 4 | 4 | 4 |
| 3100 | Coliform (TCR) | Coliform Rule | Monitoring and Reporting | 1 | 0 | 1 |
| 3100 | Coliform (TCR) | Coliform Rule | Maximum Contaminant Level Violation | 2 | 0 | 1 |
| 7500 | Public Notice (PN) | PN | Consumer Awareness | 78 | 38 | 51 |
| 7000 | Consumer Confidence Report | CCR | Consumer Awareness | 85 | 83 | 85 |
| 2039 | Di(2-ethylhexyl) phthalate | SOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2046 | Carbofuran | SOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2050 | Atrazine | SOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2051 | Lasso | SOC | Monitoring and Reporting | 5 | 0 | 5 |

| Contaminant Code | ('ontominant | | Violation Category | # of Violations | # of Resolved Violations | # of CWS in Violation |
|---------------------|-----------------------------|-----|--------------------------|-----------------|-----------------------------|--------------------------|
| 2047 | Aldicarb | SOC | Monitoring and Reporting | 3 | 0 | 3 |
| 2044 | Aldicarb Sulfone | SOC | Monitoring and Reporting | 3 | 0 | 3 |
| 2043 | Aldicarb Sulfoxide | SOC | Monitoring and Reporting | 3 | 0 | 3 |
| 2042 | Hexachlorocyclopentadiene | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2041 | Dinoseb | SOC | Monitoring and Reporting | 3 | 0 | 3 |
| 2036 | Oxamyl | SOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2035 | Di(2-ethylhexyl) adipate | SOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2306 | Benzo(a)pyrene | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2037 | Simazine | SOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2015 | Methoxychor | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2067 | Heptachlor Epoxide | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2065 | Heptachlor | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2110 | 2,4,5-TP | SOC | Monitoring and Reporting | 3 | 0 | 3 |
| 2105 | 2,4-D | SOC | Monitoring and Reporting | 3 | 0 | 3 |
| 2274 | Hexachlorobenzene | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2326 | Pentachlorophenol | SOC | Monitoring and Reporting | 3 | 0 | 3 |
| 2946 | Ethylene Dibromide | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2931 | 1,2-Dibromo-3-chloropropane | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2383 | PCBs (Total) | SOC | Monitoring and Reporting | 5 | 0 | 5 |

| Contaminant Code | ('antaminant | | Violation Category | # of Violations | # of Resolved Violations | # of CWS in Violation |
|---------------------|----------------------------|-----|--------------------------|-----------------|-----------------------------|--------------------------|
| 2040 | Picloram | SOC | Monitoring and Reporting | 3 | 0 | 3 |
| 2033 | Endothall | SOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2005 | Endrin | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2010 | BHC-Gamma | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2959 | Chlordane | SOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2020 | Toxaphene | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2031 | Dalapon | SOC | Monitoring and Reporting | 3 | 0 | 3 |
| 2032 | Diquat | SOC | Monitoring and Reporting | 4 | 0 | 4 |
| 2991 | Toluene | VOC | Monitoring and Reporting | 6 | 1 | 6 |
| 2985 | 1,1,2-Trichloroethane | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2984 | Trichloroethylene | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2983 | 1,2-Dichloropropane | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2982 | Carbon Tetrachloride | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2981 | 1,1,1-Trichloroethane | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2980 | 1,2-Dichloroethane | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2979 | Trans-1,2-Dichloroethylene | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2977 | 1,1-Dichloroethylene | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2969 | p-Dichorobenzene | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2968 | o-Dichlorobenzene | VOC | Monitoring and Reporting | 5 | 0 | 5 |

| Contaminant Code | Contaminant | Rule Family | Violation Category | # of Violations | # of Resolved Violations | # of CWS in Violation |
|---------------------|--------------------------|-------------|--------------------------|-----------------|-----------------------------|--------------------------|
| 2964 | Dichloromethane | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2955 | Xylenes, Total | VOC | Monitoring and Reporting | 7 | 0 | 7 |
| 2380 | Cis-1,2-Dichloroethylene | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2378 | 1,2,4-Trichlorobenzene | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2987 | Tetrachloroethylene | VOC | Monitoring and Reporting | 6 | 1 | 6 |
| 2989 | Chlorobenzene | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2990 | Benzene | VOC | Monitoring and Reporting | 5 | 0 | 5 |
| 2996 | Styrene | VOC | Monitoring and Reporting | 7 | 1 | 7 |
| 2992 | Ethylbenzene | VOC | Monitoring and Reporting | 6 | 1 | 6 |

Illinois DPH Annual Compliance Report Calendar Year 2019 Summary NCPWS

| Volatile | Volatile Organic Chemicals (VOCs) | | | | | | | | | |
|----------|--------------------------------------|---------------|--------------------|------------------------|---------------------------|--------------------|------------------------|---------------------------|--|--|
| | | | | MCLs | | Monitoring | | | | |
| Code | Name | MCL (mg/l) | # of Violations | # of RTC Violations | # of PWSs In Violation | # of Violations | # of RTC Violations | # of PWSs In Violation | | |
| 2977 | 1,1-Dichloroethylene | 0.007 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2981 | 1,1,1-Trichloroethane | 0.2 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2985 | 1,1,2-Trichloroethane | 0.005 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2980 | 1,2-Dichloroethane | 0.005 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2983 | 1,2-Dichloropropane | 0.005 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2378 | 1,2,4-Trichlorobenzene | 0.07 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2990 | Benzene | 0.005 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2982 | Carbon Tetrachloride | 0.005 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2380 | Cis-1,2-Dichloroethylene | 0.07 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2964 | Dichloromethane (Methylene Chloride) | 0.005 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2992 | Ethylbenzene | 0.7 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2989 | Monochlorobenzene (Chlorobenzene) | 0.1 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2968 | o-Dichlorobenzene | 0.6 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2969 | p-Dichlorobenzene | 0.075 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2996 | Styrene | 0.1 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2987 | Tetrachloroethylene | 0.005 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2991 | Toluene | 1 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2979 | Trans-1,2-Dichloroethylene | 0.1 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2984 | Trichloroethylene | 0.005 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2955 | Xylenes, Total | 10 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| 2976 | Vinyl Chloride | 0.002 | 0 | 0 | 0 | 134 | 36 | 87 | | |
| VOC T | otals | | 0 | 0 | 0 | 2,814 | 756 | 87 | | |

| | | | | MCLs | | Monitoring | | | |
|------|------------------------------------|---------|------------|------------|--------------|------------|------------|--------------|--|
| Code | Name | MCL | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs | |
| | | (mg/l) | Violations | Violations | In Violation | Violations | Violations | In Violation | |
| 2931 | 1,2 Dibromo-3-Chloropropane (DBCP) | 0.0002 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2105 | 2,4-D | 0.07 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2063 | 2,3,7,8-TCDD (Dioxin) | 3x10-8 | - | - | - | - | - | - | |
| 2110 | 2,4,5-TP (Silvex) | 0.05 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2051 | Alachlor (Lasso) | 0.002 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2047 | Aldicarb | NA | - | - | - | - | - | - | |
| 2044 | Aldicarb Sulfone | NA | - | - | - | - | - | - | |
| 2043 | Aldicarb Sulfoxide | NA | - | - | - | _ | - | - | |
| 2050 | Atrazine | 0.003 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2306 | Benzo (A) Pyrene | 0.0002 | 0 | 0 | 0 | 31 | 9 | 13 | |
| 2010 | BHC-gamma (Lindane) | 0.0002 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2046 | Carbofuran | 0.04 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2959 | Chlordane | 0.002 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2031 | Dalapon | 0.2 | 0 | 0 | 0 | 31 | 9 | 13 | |
| 2035 | Di(2-Ethylhexyl) Adipate | 0.4 | 0 | 0 | 0 | 31 | 9 | 13 | |
| 2039 | Di(2-Ethylhexyl) Phthalate | 0.006 | 0 | 0 | 0 | 31 | 9 | 13 | |
| 2041 | Dinoseb | 0.007 | 0 | 0 | 0 | 31 | 9 | 13 | |
| 2032 | Diquat | 0.02 | 0 | 0 | 0 | 128 | 13 | 108 | |
| 2033 | Endothall | 0.1 | 0 | 0 | 0 | 128 | 13 | 110 | |
| 2005 | Endrin | 0.002 | 0 | 0 | 0 | 31 | 9 | 13 | |
| 2946 | Ethylene Dibromide (EDB) | 0.00005 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2034 | Glyphosate | 0.7 | 0 | 0 | 0 | 128 | 13 | 100 | |
| 2065 | Heptachlor | 0.0004 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2067 | Heptachlor Epoxide | 0.0002 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2274 | Hexachlorobenzene (HCB) | 0.001 | 0 | 0 | 0 | 31 | 9 | 13 | |
| 2042 | Hexachlorocyclopentadiene | 0.05 | 0 | 0 | 0 | 31 | 9 | 13 | |
| 2015 | Methoxychlor | 0.04 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2036 | Oxamyl (Vydate) | 0.2 | 0 | 0 | 0 | 128 | 13 | 110 | |
| 2326 | Pentachlorophenol | 0.001 | 0 | 0 | 0 | 148 | 21 | 114 | |
| 2040 | Picloram | 0.5 | 0 | 0 | 0 | 128 | 13 | 110 | |

| | | | | MCLs | | | Monitoring | | |
|--------|---------------------------------------|---------------|----------------------------|------------------------|---------------------------|--------------------|------------------------|---------------------------|--|
| Code | Name | MCL (mg/l) | # of Violations | # of RTC Violations | # of PWSs In Violation | # of Violations | # of RTC Violations | # of PWSs In Violation | |
| 2037 | Simazine | 0.004 | 0 | 0 | 0 | 128 | 13 | 110 | |
| 2383 | Total Polychlorinated Biphenyls (PCB) | 0.0005 | 0 | 0 | 0 | 120 | 20 | 86 | |
| 2020 | Toxaphene | 0.003 | 0 | 0 | 0 | 148 | 21 | 114 | |
| | | | 1 | | | T | | _ | |
| SOC To | otals | | 0 | 0 | 0 | 3,208 | 464 | 114 | |
| | | | | | | | | | |
| | | | Treatment Technique | | | Monitoring | | | |
| Code | Name | MCL | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs | |
| | | (mg/l) | Violations | Violations | In Violation | Violations | Violations | In Violation | |
| 2257 | Epichlorohydrin | TT | - | - | = | - | - | = | |
| 2265 | Acrylamide | TT | - | - | - | - | - | - | |
| | | | 1 | | | 1 | | | |
| Totals | | | - | - | - | - | - | - | |

| Ground Water | Ground Water Rule (GWR) | | | | | | | | |
|---|---|-----------------|---------------------|---------------------------|--|--|--|--|--|
| Violation Type (code) | Violation Name | # of Violations | # of RTC Violations | # of PWSs In Violation | | | | | |
| 31 (0700) & 19 (3002, 3014, 3028) | Monitoring of Treatment (Major Monitoring) | 0 | 0 | 0 | | | | | |
| 34 (3014) | Monitoring of Source (Major Monitoring) | 0 | 0 | 0 | | | | | |
| 41 (0700) | Failure to Maintain Microbial Treatment - TT | 0 | 0 | 0 | | | | | |
| 42 (0700) | Failure to Provide Treatment -TT | 0 | 0 | 0 | | | | | |
| 45, 48 (0700) | Failure to Address Deficiency – TT | 0 | 0 | 0 | | | | | |
| | | Monitoring | Trea | tment Technique | | | | | |

| | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs |
|------------|------------|------------|--------------|------------|------------|--------------|
| | Violations | Violations | In Violation | Violations | Violations | In Violation |
| GWR Totals | 0 | 0 | 0 | 0 | 0 | 0 |

| Inorga | Inorganic Chemicals (IOCs) | | | | | | | | | |
|--------|----------------------------|------------|--------------------|------------------------|---------------------------|--------------------|------------------------|-----------------|--|--|
| | | | MCLs | | Monitoring | | | | | |
| Code | Name | MCL (mg/l) | # of Violations | # of RTC Violations | # of PWSs In Violation | # of Violations | # of RTC Violations | # of PWSs In | | |
| | | | | | | | | Violation | | |
| 1074 | Antimony, Total | 0.006 | 0 | 0 | 0 | 82 | 12 | 80 | | |
| 1005 | Arsenic | 0.01 | 9 | 5 | 3 | 82 | 15 | 73 | | |
| 1010 | Barium | 2 | 0 | 0 | 0 | 82 | 12 | 80 | | |
| 1075 | Beryllium, Total | 0.004 | 0 | 0 | 0 | 82 | 12 | 80 | | |
| 1015 | Cadmium | 0.005 | 0 | 0 | 0 | 82 | 12 | 80 | | |
| 1020 | Chromium | 0.1 | 0 | 0 | 0 | 82 | 12 | 80 | | |
| 1024 | Cyanide | 0.2 | 0 | 0 | 0 | 82 | 12 | 80 | | |
| 1025 | Fluoride | 4 | - | - | - | Г | - | ı | | |
| 1035 | Mercury | 0.002 | 0 | 0 | 0 | 82 | 12 | 80 | | |
| 1040 | Nitrate | 10 | 2 | 2 | 2 | 986 | 31 | 942 | | |
| 1038 | Total Nitrite & Nitrate | 10 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 1041 | Nitrite | 1 | 0 | 0 | 0 | 303 | 0 | 301 | | |
| 1045 | Selenium | 0.05 | 0 | 0 | 0 | 82 | 12 | 80 | | |
| 1085 | Thallium, Total | 0.002 | 0 | 0 | 0 | 82 | 12 | 80 | | |
| 1094 | Asbestos | 7 MFL | - | - | - | - | - | - | | |
| IOC T | otals | | 11 | 7 | 5 | 2,109 | 154 | 1,131 | | |

| Coliform (TC Violation Type | R) Violation Name | # of Violations | # of RTC Violations | # of PWSs In Violation |
|-----------------------------------|-----------------------------------|-----------------|---------------------|---------------------------|
| 1A | MCL, Ecoli | 2 | 0 | 2 |
| 21 | MCL, Acute | NA | NA | NA |
| 22 | MCL, Monthly | NA | NA | NA |
| 23, 25 | Monitoring Routine & Repeat Major | NA | NA | NA |
| 3A | Monitoring, Major | 28 | 3 | 26 |

| | | MCLs | | Monitoring | | | |
|------------|------------|------------|--------------|------------|------------|--------------|--|
| | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs | |
| | Violations | Violations | In Violation | Violations | Violations | In Violation | |
| TCR Totals | 2 | 0 | 2 | 28 | 3 | 26 | |

| Lead and Cop | Lead and Copper Rule (LCR) | | | | | | | | | |
|-------------------|--|-----------------|---------------------|---------------------------|--|--|--|--|--|--|
| Violation Type | Violation Name | # of Violations | # of RTC Violations | # of PWSs In Violation | | | | | | |
| Type | | | _ | Violation | | | | | | |
| 51 | Monitoring, Initial Tap Sampling for Pb/Cu | 24 | 2 | 16 | | | | | | |
| 52 | Monitoring, Follow-up & Routine Tap | 86 | 7 | 76 | | | | | | |
| | Sampling for Pb/Cu | | | | | | | | | |
| 58 | Treatment Installation | 0 | 0 | 0 | | | | | | |
| 65 | Public Education | 0 | 0 | 0 | | | | | | |

| | Monitoring | | | Treatment Technique | | | |
|------------|------------|------------|---|---------------------|----------|-----------|--|
| | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs | |
| | Violations | Violations | Violations In Violation Violations Violations | | | | |
| LCR Totals | 110 | 9 | 92 | 0 | 0 | 0 | |

| Violation | Contam | tment Rule Vi | olation Nam | e | # of Violati | ions | # of R | TC Vi | olations | # of PW | | |
|-----------------------------|------------------------|------------------------|----------------------------|----------------------|--------------|-----------|--------|------------------|------------|-----------------|----------------------|--|
| Type | Code | | | | | | | | | Violation | | |
| 41 SWTR | 0200 | SWTR Tre Filtered | atment Techniq | ue, | 0 | | | 0 | 0 | | | |
| 42 SWTR | 0200 | SWTR Tre Unfiltered | atment Techniq | ue, | 0 | | | 0 | | 0 | | |
| 31and 36 | 0200 | SWTR Ma | jor Monitoring, | (M/R) | 0 | | | 0 | | 0 | | |
| 03 SWTR | 0100 | | Monitoring/Repo | | 0 | | | 0 | | 0 | | |
| 32 LT2 | 0800,3025 3014,3015 | Monitoring | g, (M/R) | | 0 | | | 0 | | 0 | | |
| 32 Turbidity | 0100 | Monitoring | Monitoring, (M/R) | | 0 | 0 | | | 0 | | | |
| 33 LT2 | 0800 | LT2 Repor | LT2 Reporting | | | 0 | | | 0 | | | |
| 37 | 0300 | IESWTR T | IESWTR Treatment Technique | | | 0 | | | 0 | | | |
| IESWTR | | Failure to I | Failure to Profile | | | | | | | | | |
| 41, 42, 45 LT2 | 0800 | LT2 Treatr | nent Technique | | 0 | 0 | | | 0 | | | |
| 43, 44, and 47 IESWTR | 0300 | IESWTR T | reatment Techr | nique | 0 | 0 | | 0 | | | | |
| 29 and 38 IESWTR | 0300 | IESWTR N | Aajor Monitorin | g | 0 | 0 | | 0 | | 0 | | |
| 09 IESWTR | 0300 | IESWTR Record Keeping | | | 0 | 0 | | | | 0 | | |
| | | | MCLs | | | Monitorin | ng | | Tre | eatment Technic | que | |
| | | # of | # of RTC | # of | # of | # of RTC | C # | # of | # of | # of RTC | # of | |
| | | Violations | Violations | PWSs In Violation | Violations | Violation | | /Ss In lation | Violations | Violations | PWSs In Violation | |
| SWTR/IE Tota | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | |

| Consumer N | Notificati | on | | | | | | | | | | |
|-----------------------|------------|--------------------|---|----------------------|------------|-----------|---------|----------------------|--------------|-----------|--------|-------------------|
| Violation | | ation Name | | # of Vio | olations | | # of R | TC Violat | ions | # of PWS | s In | |
| Туре | | | | | | | | | | Violation | | |
| 75 | Pub | lic Notice Rule | Reporting | | 0 | | | 0 | | | 0 | |
| Stage 1 Disi | | | tion Byproduct | s Rule (Stage | 1 DBPR) | | • | | | | | |
| Violation | Contai | n Violation | n Name | | | # of Viol | lations | # of RT | C Violations | # o | f PWS | s In |
| Type | Code | | | | | | | | | Vio | lation | |
| 12 and 37 | 0400 | | d Operator Fai Consult TT | lure or Failur | e to | 0 | 0 0 | | 0 | | | 0 |
| 46 | 2920 | Inadequ Techniq | ate DBP Precu ue | rsor Removal | Treatment | 0 | 0 | | | | 0 | |
| 02 | 1011 | Bromate | | | | 0 |) | | 0 | | | 0 |
| 02 | 1009 | Chlorite | MCL | | | 0 |) | | 0 | | | 0 |
| 02 | 2456 | Total Ha | otal Haloacetic Acids (HAA) MCL | | | | 2 | | 0 | | | 2 |
| 02 | 2950 | | Total Trihalomethanes (TTHM) MCL | | | | | | 0 | | | 1 |
| 11 | 0999 | | Chlorine Maximum Residual Disinfectant Level (MRDL) | | | 0 | | | 0 | | | 0 |
| 11 | 1006 | / | Chloramine MRDL | | | |) | | 0 | | | 0 |
| 11 | 1008 | Chlorine | Chlorine Dioxide MRDL | | | |) | | 0 | | | 0 |
| 11 | 1008 | Chlorine | Chlorine Dioxide Monitoring | | | |) | | 0 | | | 0 |
| 13 | 1008 | Chlorine | Dioxide MRD | L Acute | | 0 |) | | 0 | | | 0 |
| 27 | 0400 | No DBP | R Monitoring I | Plan | | 0 |) | | 0 | | | 0 |
| 27 | 0999 | Chlorine | Monitoring | | | 0 |) | 0 | | | | 0 |
| 27 | 1004 | Bromide | Monitoring | | | 0 |) | 0 | | | 0 | |
| 27 | 1006 | Chloran | nine Residual M | Ionitoring | | 0 |) | 0 | | | 0 | |
| 27 | 1008 | Chlorine | Dioxide Resid | ual Monitorin | ng | 0 |) | 0 | | | 0 | |
| 27 | 1009 | Chlorite | Monitoring | | | 0 | | | 0 | | | 0 |
| 27 | 1011 | Bromate | Monitoring | | | 0 | | | 0 | | | 0 |
| 27 | 2456 | | aloacetic Acids | (HAA) Monit | oring | 4. | | | 3 | | | 32 |
| 27 | 2920 | | onitoring | | | 0 | | | 0 | | | 0 |
| 27 | 2950 | Total Tr | ihalomethanes | (TTHM) Mor | nitoring | 4 | 5 | | 3 | | | 32 |
| | | | | | | | | | | | | |
| | | | MCLs/MRDL | | | Monitorin | | | | eatment T | | |
| | | # of | # of RTC | # of | # of | # of RT | _ | # of | # of | # of R | _ | # of |
| | | Violations | Violations | PWSs In Violation | Violations | Violation | | PWSs In Violation | Violations | Violat | ions | PWSs In Violation |
| Stage 1 DBI Totals | PR | 3 | 0 | 2 | 90 | 6 | 32 | 2 | 0 | 0 | | 0 |

| Rule | Chemical | MCLs | | | Monitoring/Notification | | | Treatment Technique | | |
|---------------------------------|---------------|--------------------|------------------------|------------------------------|------------------------------|------------------------|------------------------------|---------------------|------------------------|------------------------------|
| Group | Sub- Group | # of Violations | # of RTC Violations | # of PWSs In Violation | # of Violations | # of RTC Violations | # of PWSs In Violation | # of Violations | # of RTC Violations | # of PWSs In Violation |
| CHEM | VOC | 0 | 0 | 0 | 2,814 | 756 | 87 | | | |
| | SOC | 0 | 0 | 0 | 3,208 | 464 | 114 | | | |
| | IOC | 11 | 7 | 5 | 2,109 | 154 | 1,131 | | | |
| CHEM S | Subtotal | 11 | 7 | 5 | 8,131 | 1,374 | 1,173 | | | |
| TCR Sul | btotal | 2 | 0 | 2 | 28 | 3 | 26 | | | |
| Stage 1 I Subtotal | | 3 | 0 | 2 | 90 | 6 | 32 | 0 | 0 | 0 |
| All SWT | Rs Subtotal | | | | 0 | 0 | 0 | 0 | 0 | 0 |
| LCR Su | btotal | | | | 110 | 9 | 92 | 0 | 0 | 0 |
| GWR | | | | | 0 | 0 | 0 | 0 | 0 | 0 |
| Consum Notificat Subtotal | tion | | | | - | - | - | | | |
| TOTAL | | 16 | 7 | 8 | 8,359 | 1,392 | 1,228 | 0 | 0 | 0 |
| Total Nu | umber of NCP | WSs | _ | | mber NCPWS oring, and Treatr | | | Total of NCPV | | |

^{***} Public notice for monitoring violations is not included in the compliance rate.

| Synthetic Organic Chemicals (SOCs) | | | | | | | |
|------------------------------------|------|------------|--|--|--|--|--|
| | | | | | | | |
| | MCLs | Monitoring | | | | | |

| Code | Name | MCL | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs |
|---------|------------------------------------|---------|------------|------------|--------------|------------|------------|--------------|
| | | (mg/l) | Violations | Violations | In Violation | Violations | Violations | In Violation |
| 2931 | 1,2 Dibromo-3-Chloropropane (DBCP) | 0.0002 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2105 | 2,4-D | 0.07 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2063 | 2,3,7,8-TCDD (Dioxin) | 3x10-8 | - | - | - | - | - | - |
| 2110 | 2,4,5-TP (Silvex) | 0.05 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2051 | Alachlor (Lasso) | 0.002 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2047 | Aldicarb | NA | - | - | - | - | - | - |
| 2044 | Aldicarb Sulfone | NA | - | - | - | - | - | - |
| 2043 | Aldicarb Sulfoxide | NA | - | - | - | - | - | - |
| 2050 | Atrazine | 0.003 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2306 | Benzo (A) Pyrene | 0.0002 | 0 | 0 | 0 | 16 | 5 | 11 |
| 2010 | BHC-gamma (Lindane) | 0.0002 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2046 | Carbofuran | 0.04 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2959 | Chlordane | 0.002 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2031 | Dalapon | 0.2 | 0 | 0 | 0 | 15 | 5 | 9 |
| 2035 | Di(2-Ethylhexyl) Adipate | 0.4 | 0 | 0 | 0 | 15 | 5 | 9 |
| 2039 | Di(2-Ethylhexyl) Phthalate | 0.006 | 0 | 0 | 0 | 18 | 8 | 11 |
| 2041 | Dinoseb | 0.007 | 0 | 0 | 0 | 15 | 5 | 10 |
| 2032 | Diquat | 0.02 | 0 | 0 | 0 | 16 | 5 | 11 |
| 2033 | Endothall | 0.1 | 0 | 0 | 0 | 16 | 5 | 11 |
| 2005 | Endrin | 0.002 | 0 | 0 | 0 | 15 | 5 | 10 |
| 2946 | Ethylene Dibromide (EDB) | 0.00005 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2034 | Glyphosate | 0.7 | 0 | 0 | 0 | 16 | 5 | 11 |
| 2065 | Heptachlor | 0.0004 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2067 | Heptachlor Epoxide | 0.0002 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2274 | Hexachlorobenzene (HCB) | 0.001 | 0 | 0 | 0 | 15 | 5 | 10 |
| 2042 | Hexachlorocyclopentadiene | 0.05 | 0 | 0 | 0 | 15 | 5 | 10 |
| 2015 | Methoxychlor | 0.04 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2036 | Oxamyl (Vydate) | 0.2 | 0 | 0 | 0 | 16 | 5 | 11 |
| 2326 | Pentachlorophenol | 0.001 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2040 | Picloram | 0.5 | 0 | 0 | 0 | 16 | 5 | 11 |
| SOCs (c | cont'd) | _ I | | | <u> </u> | Γ | 1 | |
| | | | | MCLs | | | Monitoring | |

| Code | Name | MCL | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs |
|--------|---------------------------------------|--------|------------|---------------|--------------|------------|------------|--------------|
| | | (mg/l) | Violations | Violations | In Violation | Violations | Violations | In Violation |
| 2037 | Simazine | 0.004 | 0 | 0 | 0 | 16 | 5 | 11 |
| 2383 | Total Polychlorinated Biphenyls (PCB) | 0.0005 | 0 | 0 | 0 | 25 | 8 | 16 |
| 2020 | Toxaphene | 0.003 | 0 | 0 | 0 | 25 | 8 | 16 |
| | | | | | | | | |
| SOC To | otals | | 0 | 0 | 0 | 595 | 193 | 16 |
| | | | | | | | | |
| | | | T | reatment Tech | nique | | Monitoring | |
| Code | Name | MCL | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs |
| | | (mg/l) | Violations | Violations | In Violation | Violations | Violations | In Violation |
| 2257 | Epichlorohydrin | TT | - | - | - | - | - | - |
| 2265 | Acrylamide | TT | - | - | - | - | - | - |
| | • | • | • | | | | | |
| | | | | | | | | |

| Ground Water | r Rule (GWR) | | | | | | | |
|-------------------|---|------------|---------------|------|----------|-----------------|------------|--------------|
| Violation | Violation Name | # | of Violations | | # of R | ΓC Violations | # of l | PWSs In |
| Type (code) | | | | | | | Vio | olation |
| 31 (0700) & | Monitoring of Treatment (Major | | 0 | | | 0 | | 0 |
| 19 (3002, | Monitoring) | | | | | | | |
| 3014, 3028) | _ | | | | | | | |
| 34 (3014) | Monitoring of Source (Major Monitoring | g) | 0 | | | 0 | 0 | |
| 41 (0700) | Failure to Maintain Microbial Treatment | nt - 0 | | 0 | | 0 | | |
| | TT | | | | | | | |
| 42 (0700) | Failure to Provide Treatment -TT | | 0 | | 0 | | | 0 |
| 45, 48 (0700) | Failure to Address Deficiency – TT | | 0 | | 0 | | | 0 |
| | | | | | | | | |
| | | Monitoring | | | Tre | eatment Technic | que | |
| | | # of | # of RTC | # o: | f PWSs | # of | # of RTC | # of PWSs |
| | | Violations | Violations | In V | iolation | Violations | Violations | In Violation |
| GWR Totals | | 0* | 0* | | 0* | 0* | 0* | 0* |

| Inorganic Chemicals (IOCs) | | |
|-----------------------------------|------|------------|
| | | |
| | MCLs | Monitoring |

| Code | Name | MCL | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs |
|-------|-------------------------|--------|------------|------------|--------------|------------|------------|-----------|
| | | (mg/l) | Violations | Violations | In Violation | Violations | Violations | In |
| | | | | | | | | Violation |
| 1074 | Antimony, Total | 0.006 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1005 | Arsenic | 0.01 | 8 | 3 | 4 | 14 | 0 | 10 |
| 1010 | Barium | 2 | 0 | 0 | 0 | 4 | 0 | 1 |
| 1075 | Beryllium, Total | 0.004 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1015 | Cadmium | 0.005 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1020 | Chromium | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1024 | Cyanide | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1025 | Fluoride | 4 | - | - | - | - | - | - |
| 1035 | Mercury | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1040 | Nitrate | 10 | 0 | 0 | 0 | 1127 | 120 | 1064 |
| 1038 | Total Nitrite & Nitrate | 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1041 | Nitrite | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| 1045 | Selenium | 0.05 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1085 | Thallium, Total | 0.002 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1094 | Asbestos | 7 MFL | - | - | - | - | - | - |
| IOC T | otals | | 9 | 3 | 5 | 120 | 120 | 1064 |

| Coliform (TC | Coliform (TCR) | | | | | | | | | |
|--------------|-----------------------------------|-----------------|---------------------|--------------|--|--|--|--|--|--|
| Violation | Violation Name | # of Violations | # of RTC Violations | # of PWSs In | | | | | | |
| Type | | | | Violation | | | | | | |
| 1A | MCL, Ecoli | 14* | 1* | 13* | | | | | | |
| 21 | MCL, Acute | NA | NA | NA | | | | | | |
| 22 | MCL, Monthly | NA | NA | NA | | | | | | |
| 23, 25 | Monitoring Routine & Repeat Major | NA | NA | NA | | | | | | |
| 3A | Monitoring, Major | 45* | 27* | 42* | | | | | | |

| | | MCLs | | Monitoring | | | |
|------------|------------|------------|--------------|------------|------------|--------------|--|
| | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs | |
| | Violations | Violations | In Violation | Violations | Violations | In Violation | |
| TCR Totals | 14* | 1* | 13* | 45* | 27* | 42* | |

| Lead and Cop | Lead and Copper Rule (LCR) | | | | | | | | | |
|-------------------|---|-----------------|---------------------|---------------------------|--|--|--|--|--|--|
| Violation Type | Violation Name | # of Violations | # of RTC Violations | # of PWSs In Violation | | | | | | |
| 51 | Monitoring, Initial Tap Sampling for Pb/Cu | 10 | 0 | 9 | | | | | | |
| 52 | Monitoring, Follow-up & Routine Tap Sampling for Pb/Cu | 72 | 9 | 71 | | | | | | |
| 58 | Treatment Installation | 0 | 0 | 0 | | | | | | |
| 65 | Public Education | 1 | 1 | 1 | | | | | | |

| | | Monitoring | , | Treatment Technique | | |
|------------|------------|------------|--------------|---------------------|------------|--------------|
| | # of | # of RTC | # of PWSs | # of | # of RTC | # of PWSs |
| | Violations | Violations | In Violation | Violations | Violations | In Violation |
| LCR Totals | 83 | 10 | 72 | 1 | 1 | 1 |

| Surface W | ater Treat | ment Rule | s (SWTR) | | | | | | | | |
|-----------------------------|------------------------|--------------------------------|------------------------|------------------------------|--------------------|----------------------|------|------------------------------|--------------------|------------------------|------------------------------|
| Violation Type | Contam Code | | olation Nam | e | # of Violati | ions | # (| of RTC Vio | olations | # of PW Violat | |
| 41 SWTR | 0200 | SWTR Tre Filtered | atment Techniq | ue, | 0 | | | 0 | | 0 | |
| 42 SWTR | 0200 | SWTR Tre Unfiltered | atment Techniq | ue, | 0 | | 0 | | | 0 | |
| 31and 36 | 0200 | SWTR Ma | jor Monitoring, | (M/R) | 0 | | | 0 | | 0 | |
| 03 SWTR | 0100 | Turbidity Monitoring/Reporting | | orting | 0 | | | 0 | | 0 | |
| 32 LT2 | 0800,3025 3014,3015 | Monitoring | g, (M/R) | | 0 | | | 0 | | 0 | |
| 32 Turbidity | 0100 | Monitoring, (M/R) | | | 0 | | 0 | | | 0 | |
| 33 LT2 | 0800 | LT2 Repor | ting | | 0 | | 0 | | | 0 | |
| 37 | 0300 | IESWTR T | reatment Techr | nique | 0 | | | 0 | | 0 | |
| IESWTR | | Failure to F | | - | | | | | | | |
| 41, 42, 45 LT2 | 0800 | LT2 Treatn | nent Technique | | 0 | | 0 | | | 0 | |
| 43, 44, and 47 IESWTR | 0300 | IESWTR T | reatment Techr | nique | 0 | | | 0 | | 0 | |
| 29 and 38 IESWTR | 0300 | IESWTR N | Aajor Monitorin | g | 0 | | | 0 | | 0 | |
| 09 IESWTR | 0300 | IESWTR R | Record Keeping | | 0 | | | 0 | | 0 | |
| | | MCLs | | | Monitoring | | ng T | | | reatment Technique | |
| | | # of Violations | # of RTC Violations | # of PWSs In Violation | # of Violations | # of RT Violation | _ | # of PWSs In Violation | # of Violations | # of RTC Violations | # of PWSs In Violation |
| SWTR/IE Tota | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |

| Consumer N | Notificatio | n | | | | | | | | | | |
|-----------------------|-------------|---------------|--|----------------------|------------|------------|---------|-------------------------|----------------|--------------|----------------------|--|
| Violation | Viola | tion Name | | # of Vio | olations | | # of R' | TC Violat | | # of PWSs In | | |
| Type | | | | | | | | | | Violation*** | | |
| 75 | | c Notice Rule | | | 0 | | 0 | | | 0 | | |
| Stage 1 Disi | nfectants | | tion Byproduct | s Rule (Stage | 1 DBPR) | | | | | | | |
| Violation | Contam | Violation | n Name | | | # of Viola | ations | ons # of RTC Violations | | # of PWSs In | | |
| Type | Code | | | | | | | | | Violation | 1 | |
| 12 and 37 | 0400 | | Qualified Operator Failure or Failure to Profile/Consult TT | | | 0 | | | 0 | | 0 | |
| 46 | 2920 | - | Inadequate DBP Precursor Removal Treatment Technique | | | 0 | | 0 | | | 0 | |
| 02 | 1011 | Bromate | omate MCL | | | 0 | | | 0 | | 0 | |
| 02 | 1009 | | Chlorite MCL | | | 0 | | | 0 | | 0 | |
| 02 | 2456 | Total Ha | aloacetic Acids | (HAA) MCL | | 0 | | | 0 | | 0 | |
| 02 | 2950 | Total Tr | rihalomethanes | (TTHM) MC | L | 0 | | | 0 | | 0 | |
| 11 | 0999 | | Chlorine Maximum Residual Disinfectant Level (MRDL) | | | 0 | | 0 | | | 0 | |
| 11 | 1006 | | Chloramine MRDL | | | 0 | | | 0 | | 0 | |
| 11 | 1008 | Chlorine | Chlorine Dioxide MRDL | | | 0 | | | 0 | | 0 | |
| 11 | 1008 | Chlorine | Chlorine Dioxide Monitoring | | | 0 | | | 0 | | 0 | |
| 13 | 1008 | Chlorine | e Dioxide MRD | L Acute | | 0 | | | 0 | | 0 | |
| 27 | 0400 | No DBP | R Monitoring I | Plan | | 0 | | 0 | | | 0 | |
| 27 | 0999 | Chlorine | e Monitoring | | | 0 | | 0 | | | 0 | |
| 27 | 1004 | Bromide | Monitoring | | | 0 | | 0 | | | 0 | |
| 27 | 1006 | Chloran | nine Residual M | Ionitoring | | 0 | | 0 | | | 0 | |
| 27 | 1008 | Chlorine | Dioxide Resid | ual Monitorir | ng | 0 | | | 0 | | 0 | |
| 27 | 1009 | Chlorite | Monitoring | | | 0 | | | 0 | | 0 | |
| 27 | 1011 | | Monitoring | | | 0 | | | 0 | | 0 | |
| 27 | 2456 | | aloacetic Acids | (HAA) Monit | oring | 32 | | | 3 | | 26 | |
| 27 | 2920 | | onitoring | | | 0 | | | 0 | | 0 | |
| 27 | 2950 | Total Tr | rihalomethanes | (TTHM) Mor | nitoring | 32 | | | 3 | | 26 | |
| | | | | | | | | | | | | |
| | MCLs/MRDL | | | | Monitoring | | | | eatment Techni | | | |
| | | # of | # of RTC | # of | # of | # of RTC | | # of | # of | # of RTC | # of | |
| | | Violations | Violations | PWSs In Violation | Violations | Violation | | WSs In iolation | Violations | Violations | PWSs In Violation | |
| Stage 1 DBI Totals | PR | 0 | 0 | 0 | 64 | 6 | 26 | | 0 | 0 | 0 | |

| 2017 St | tate Summa | ry – Non-Co | mmunity W | ater Suppli | es (NCPWS) | | | T | | _ |
|-----------------------|---------------------|--------------------|------------------------|------------------------------|------------------------------|------------------------|------------------------------|--------------------------------|------------------------|------------------------------|
| Rule Group | Chemical Sub- | MCLs | | | Monitoring/Notification | | | Trea | atment Techni | que |
| | Group | # of Violations | # of RTC Violations | # of PWSs In Violation | # of Violations | # of RTC Violations | # of PWSs In Violation | # of Violations | # of RTC Violations | # of PWSs In Violation |
| CHEM | VOC | 0 | 0 | 0 | 1,512 | 315 | 57 | | | |
| | SOC | 0 | 0 | 0 | 595 | 193 | 16 | | | |
| | IOC | 9 | 3 | 5 | 1,127 | 120 | 1,064 | | | |
| CHEM S | Subtotal | 9 | 3 | 5 | 3,234 | 628 | 1,146 | | | |
| TCR Su | btotal | 14 | 1 | 13 | 45* | 27* | 42* | | | |
| Stage 1 l Subtotal | | 0 | 0 | 0 | 64 | 6 | 26 | 0 | 0 | 0 |
| All SWT | Rs Subtotal | | | | 0 | 0 | 0 | 0 | 0 | 0 |
| LCR Su | btotal | | | | 83 | 10 | 72 | 1 | 1 | 1 |
| GWR | | | | | 0 | 0 | 0 | 0 | 0 | 0 |
| Consum Notificat | er tion Subtotal | | | | - | - | - | | | |
| TOTAL | | 23 | 4 | 18 | 3,426** | 671** | 1,198** | 1 | 1 | 1 |
| Total Nu | ımber of NCP | WSs | Gr | | mber NCPWS oring, and Treatr | | | Total of NCPV L, Monitoring, a | | |
| | 3, | 785 | | 3,450** | | | | 1,210*** | | |

^{*} These figures have not been verified with Local Health Department staff that have direct oversight for these water systems.

** This data is incomplete at this time.

*** Public notice for monitoring violations is not included in the compliance rate.

Appendix C

Illinois EPA 2019 Annual Compliance Report Maximum Contaminant Level and Treatment Technique Violations by CWS Sort by Contaminant From USEPA's CDX Reporting Services database

| Contaminant Name | Community Water System ID | Community Water System Name | Violation Category | Compliance Status |
|-------------------------------|------------------------------|--|---------------------------|------------------------|
| ARSENIC | IL0115135 | MAPLE ACRES MHP | MCL | Returned to Compliance |
| ARSENIC | IL0195925 | TRIANGLE MHP | MCL | Under Enforcement |
| ARSENIC | IL0195945 | FOUNTAIN VALLEY MHP | MCL | Returned to Compliance |
| ARSENIC | IL0450100 | CHRISMAN | MCL | Under Enforcement |
| ARSENIC | IL0730080 | HICKORY HILLS 2ND ADDITION WATER ASSN | MCL | Under Enforcement |
| ARSENIC | IL0735280 | LYNWOOD 3RD ADDITION | MCL | Under Enforcement |
| ARSENIC | IL0970240 | BLUFF LAKE LODGES, INC. | MCL | Under Enforcement |
| ARSENIC | IL0990200 | GRAND RIDGE | MCL | Returned to Compliance |
| ARSENIC | IL1030450 | STEWARD | MCL | Returned to Compliance |
| ARSENIC | IL1135100 | COLONIAL MEADOWS WATER COMPANY | MCL | Returned to Compliance |
| ARSENIC | IL1550150 | MCNABB | MCL | Returned to Compliance |
| COLIFORM (TCR) | IL0975460 | LCPW-KNOLLWOOD PWS | MCL | Inactive |
| COMBINED RADIUM (-226 & -228) | IL0150300 | SHANNON | MCL | Under Enforcement |
| COMBINED RADIUM (-226 & -228) | IL0630200 | COAL CITY | MCL | Under Enforcement |
| COMBINED RADIUM (-226 & -228) | IL0975736 | ELM OAK MUTUAL WATER SYSTEM | MCL | Under Enforcement |
| COMBINED RADIUM (-226 & -228) | IL1610100 | CARBON CLIFF | MCL | Under Enforcement |
| COMBINED RADIUM (-226 & -228) | IL1775255 | TIMBER RIDGE MOBILE ESTATES | MCL | Returned to Compliance |
| COMBINED RADIUM (-226 & -228) | IL1775255 | TIMBER RIDGE MOBILE ESTATES | MCL | Under Enforcement |
| COMBINED RADIUM (-226 & -228) | IL2015488 | GREAT OAKS AND BEACON HILLS APARTMENTS | MCL | Under Enforcement |
| GROSS ALPHA, EXCL. RADON & U | IL0150300 | SHANNON | MCL | Under Enforcement |
| LEAD & COPPER RULE | IL0110650 | MINERAL | TT | Other |
| LEAD & COPPER RULE | IL0111100 | WALNUT | TT | Under Enforcement |
| LEAD & COPPER RULE | IL0190050 | BROADLANDS | TT | Other |

| Contaminant Name | Community Water System ID | Community Water System Name | Violation Category | Compliance Status |
|---------------------------------------|------------------------------|------------------------------------|--------------------|------------------------|
| LEAD & COPPER RULE | IL0230050 | CASEY | TT | Returned to Compliance |
| LEAD & COPPER RULE | IL0230200 | WESTFIELD | TT | Returned to Compliance |
| LEAD & COPPER RULE | IL0530150 | KEMPTON | TT | Returned to Compliance |
| LEAD & COPPER RULE | IL0555250 | HILL CITY WATER DISTRICT | TT | Returned to Compliance |
| LEAD & COPPER RULE | IL0710050 | BIGGSVILLE | TT | Other |
| LEAD & COPPER RULE | IL0735150 | OPHIEM PWS | TT | Returned to Compliance |
| LEAD & COPPER RULE | IL0735280 | LYNWOOD 3RD ADDITION | TT | Other |
| LEAD & COPPER RULE | IL0750400 | DONOVAN | TT | Returned to Compliance |
| LEAD & COPPER RULE | IL1130300 | CHENOA | TT | Returned to Compliance |
| LEAD & COPPER RULE | IL1135150 | CROPSEY MUTUAL WATER ASSOCIATION | TT | Other |
| LEAD & COPPER RULE | IL1350700 | WAGGONER | TT | Other |
| LEAD & COPPER RULE | IL1955225 | HONEYCUTT HILL MHP LLC | TT | Other |
| NITRATE | IL0010400 | LIMA | MCL | Returned to Compliance |
| NITRATE | IL0210050 | ASSUMPTION | MCL | Under Enforcement |
| NITRATE | IL0995185 | COUNTRYSIDE ESTATES MHP | MCL | Returned to Compliance |
| NITRATE | IL1070400 | MOUNT PULASKI | MCL | Under Enforcement |
| NITRATE | IL1075145 | MORNINGSIDE MOBILE ESTATES MHP | MCL | Returned to Compliance |
| NITRITE | IL0450100 | CHRISMAN | MCL | Returned to Compliance |
| NITRITE | IL0751000 | WOODLAND | MCL | Returned to Compliance |
| REVISED TOTAL COLIFORM RULE (RTCR) | EIL0310390 | CALUMET CITY | MCL | Returned to Compliance |
| REVISED TOTAL COLIFORM RULE (RTCR) | EIL0314740 | PARK FOREST | MCL | Returned to Compliance |
| REVISED TOTAL COLIFORM RULE (RTCR) | EIL0314970 | WHEELING | MCL | Returned to Compliance |
| REVISED TOTAL COLIFORM RULE (RTCR) | IL0437245 | VIETZEN MHP | MCL | Returned to Compliance |
| REVISED TOTAL COLIFORM RULE (RTCR) | IL1795345 | STONETOWN EDGEWOOD TERRACE, LLC | TT | Returned to Compliance |
| TOTAL HALOACETIC ACIDS (HAA5) | IL0050100 | MULBERRY GROVE | MCL | Under Enforcement |

| Contaminant Name | Community Water System ID | Community Water System Name | Violation Category | Compliance Status |
|-------------------------------|------------------------------|---------------------------------|--------------------|------------------------|
| TOTAL HALOACETIC ACIDS (HAA5) | IL0054360 | DONNELLSON | MCL | Under Enforcement |
| TOTAL HALOACETIC ACIDS (HAA5) | IL0610150 | GREENFIELD | MCL | Under Enforcement |
| TOTAL HALOACETIC ACIDS (HAA5) | IL1350020 | MONTGOMERY COUNTY WATER COMPANY | MCL | Under Enforcement |
| TOTAL HALOACETIC ACIDS (HAA5) | IL1350150 | COFFEEN | MCL | Returned to Compliance |
| TOTAL HALOACETIC ACIDS (HAA5) | IL1350300 | HILLSBORO | MCL | Under Enforcement |
| TOTAL HALOACETIC ACIDS (HAA5) | IL1795780 | NORTH TAZEWELL PWD | MCL | Under Enforcement |
| TTHM | IL0054360 | DONNELLSON | MCL | Under Enforcement |
| TTHM | IL0490350 | MONTROSE | MCL | Under Enforcement |
| TTHM | IL0510010 | FAYETTE WATER COMPANY | MCL | Returned to Compliance |
| TTHM | IL0750350 | DANFORTH | MCL | Under Enforcement |
| TTHM | IL1130400 | COOKSVILLE | MCL | Under Enforcement |
| TTHM | IL1190950 | ST JACOB | MCL | Under Enforcement |
| TTHM | IL1195110 | HOLIDAY SHORES SD | MCL | Returned to Compliance |
| TTHM | IL1370020 | ALEXANDER WATER DISTRICT | MCL | Returned to Compliance |
| TTHM | IL1370030 | SMG WATER COOP | MCL | Returned to Compliance |
| ТТНМ | IL1370150 | FRANKLIN | MCL | Under Enforcement |
| TTHM | IL1450150 | PINCKNEYVILLE | MCL | Returned to Compliance |

Appendix C

Illinois EPA 2019 Annual Compliance Report Maximum Contaminant Level and Treatment Technique Violations Sort by CWS

From U.S. EPA's CDX Reporting Services database

| Community Water System ID | Community Water System Name | Contaminant Name | Violation Category | Compliance Status |
|------------------------------|--------------------------------|------------------------------------|--------------------|------------------------|
| IL0010400 | LIMA | NITRATE | MCL | Returned to Compliance |
| IL0050100 | MULBERRY GROVE | TOTAL HALOACETIC ACIDS (HAA5) | MCL | Under Enforcement |
| IL0054360 | DONNELLSON | TOTAL HALOACETIC ACIDS (HAA5) | MCL | Under Enforcement |
| IL0054360 | DONNELLSON | TTHM | MCL | Under Enforcement |
| IL0110650 | MINERAL | LEAD & COPPER RULE | TT | Other |
| IL0111100 | WALNUT | LEAD & COPPER RULE | TT | Under Enforcement |
| IL0115135 | MAPLE ACRES MHP | ARSENIC | MCL | Returned to Compliance |
| IL0150300 | SHANNON | COMBINED RADIUM (-226 & -228) | MCL | Under Enforcement |
| IL0150300 | SHANNON | GROSS ALPHA, EXCL. RADON & U | MCL | Under Enforcement |
| IL0190050 | BROADLANDS | LEAD & COPPER RULE | TT | Other |
| IL0195925 | TRIANGLE MHP | ARSENIC | MCL | Under Enforcement |
| IL0195945 | FOUNTAIN VALLEY MHP | ARSENIC | MCL | Returned to Compliance |
| IL0210050 | ASSUMPTION | NITRATE | MCL | Under Enforcement |
| IL0230050 | CASEY | LEAD & COPPER RULE | TT | Returned to Compliance |
| IL0230200 | WESTFIELD | LEAD & COPPER RULE | TT | Returned to Compliance |
| IL0310390 | CALUMET CITY | REVISED TOTAL COLIFORM RULE (RTCR) | MCL | Returned to Compliance |
| IL0314740 | PARK FOREST | REVISED TOTAL COLIFORM RULE (RTCR) | MCL | Returned to Compliance |
| IL0314970 | WHEELING | REVISED TOTAL COLIFORM RULE (RTCR) | MCL | Returned to Compliance |
| IL0437245 | VIETZEN MHP | REVISED TOTAL COLIFORM RULE (RTCR) | MCL | Returned to Compliance |
| IL0450100 | CHRISMAN | ARSENIC | MCL | Under Enforcement |
| IL0450100 | CHRISMAN | NITRITE | MCL | Returned to Compliance |
| IL0490350 | MONTROSE | TTHM | MCL | Under Enforcement |
| IL0510010 | FAYETTE WATER COMPANY | ТТНМ | MCL | Returned to Compliance |

| IL0530150 | KEMPTON | LEAD & COPPER RULE | ТТ | Returned to Compliance |
|-----------|---|-------------------------------|-----|------------------------|
| IL0555250 | HILL CITY WATER DISTRICT | LEAD & COPPER RULE | TT | Returned to Compliance |
| IL0610150 | GREENFIELD | TOTAL HALOACETIC ACIDS (HAA5) | MCL | Under Enforcement |
| IL0630200 | COAL CITY | COMBINED RADIUM (-226 & -228) | MCL | Under Enforcement |
| IL0710050 | BIGGSVILLE | LEAD & COPPER RULE | TT | Other |
| IL0730080 | HICKORY HILLS 2ND ADDITION WATER ASSN | ARSENIC | MCL | Under Enforcement |
| IL0735150 | OPHIEM PWS | LEAD & COPPER RULE | TT | Returned to Compliance |
| IL0735280 | LYNWOOD 3RD ADDITION | ARSENIC | MCL | Under Enforcement |
| IL0735280 | LYNWOOD 3RD ADDITION | LEAD & COPPER RULE | TT | Other |
| IL0750350 | DANFORTH | ТТНМ | MCL | Under Enforcement |
| IL0750400 | DONOVAN | LEAD & COPPER RULE | TT | Returned to Compliance |
| IL0751000 | WOODLAND | NITRITE | MCL | Returned to Compliance |
| IL0970240 | BLUFF LAKE LODGES, INC. | ARSENIC | MCL | Under Enforcement |
| IL0975460 | LCPW-KNOLLWOOD PWS | COLIFORM (TCR) | MCL | Inactive |
| IL0975736 | ELM OAK MUTUAL WATER SYSTEM | COMBINED RADIUM (-226 & -228) | MCL | Under Enforcement |
| IL0990200 | GRAND RIDGE | ARSENIC | MCL | Returned to Compliance |
| IL0995185 | COUNTRYSIDE ESTATES MHP | NITRATE | MCL | Returned to Compliance |
| IL1030450 | STEWARD | ARSENIC | MCL | Returned to Compliance |
| IL1070400 | MOUNT PULASKI | NITRATE | MCL | Under Enforcement |
| IL1075145 | MORNINGSIDE MOBILE ESTATES MHP | NITRATE | MCL | Returned to Compliance |
| IL1130300 | CHENOA | LEAD & COPPER RULE | TT | Returned to Compliance |
| IL1130400 | COOKSVILLE | ТТНМ | MCL | Under Enforcement |
| IL1135100 | COLONIAL MEADOWS WATER COMPANY | ARSENIC | MCL | Returned to Compliance |

| IL1135150 | CROPSEY MUTUAL WATER ASSOCIATION | LEAD & COPPER RULE | TT | Other |
|-----------|--|------------------------------------|-----|------------------------|
| IL1190950 | ST JACOB | ТТНМ | MCL | Under Enforcement |
| IL1195110 | HOLIDAY SHORES SD | TTHM | MCL | Returned to Compliance |
| IL1350020 | MONTGOMERY COUNTY WATER COMPANY | TOTAL HALOACETIC ACIDS (HAA5) | MCL | Under Enforcement |
| IL1350150 | COFFEEN | TOTAL HALOACETIC ACIDS (HAA5) | MCL | Returned to Compliance |
| IL1350300 | HILLSBORO | TOTAL HALOACETIC ACIDS (HAA5) | MCL | Under Enforcement |
| IL1350700 | WAGGONER | LEAD & COPPER RULE | TT | Other |
| IL1370020 | ALEXANDER WATER DISTRICT | ТТНМ | MCL | Returned to Compliance |
| IL1370030 | SMG WATER COOP | ТТНМ | MCL | Returned to Compliance |
| IL1370150 | FRANKLIN | ТТНМ | MCL | Under Enforcement |
| IL1450150 | PINCKNEYVILLE | ТТНМ | MCL | Returned to Compliance |
| IL1550150 | MCNABB | ARSENIC | MCL | Returned to Compliance |
| IL1610100 | CARBON CLIFF | COMBINED RADIUM (-226 & -228) | MCL | Under Enforcement |
| IL1775255 | TIMBER RIDGE MOBILE ESTATES | COMBINED RADIUM (-226 & -228) | MCL | Under Enforcement |
| IL1775255 | TIMBER RIDGE MOBILE ESTATES | COMBINED RADIUM (-226 & -228) | MCL | Returned to Compliance |
| IL1795345 | STONETOWN EDGEWOOD TERRACE, LLC | REVISED TOTAL COLIFORM RULE (RTCR) | TT | Returned to Compliance |
| IL1795780 | NORTH TAZEWELL PWD | TOTAL HALOACETIC ACIDS (HAA5) | MCL | Under Enforcement |
| IL1955225 | HONEYCUTT HILL MHP LLC | LEAD & COPPER RULE | TT | Other |
| IL2015488 | GREAT OAKS AND BEACON HILLS APARTMENTS | COMBINED RADIUM (-226 & -228) | MCL | Under Enforcement |

Appendix D Illinois EPA 2019 Annual Compliance Report Maximum Contaminant Level and Treatment Technique Violations Sort by NCPWS

| NCPWS | NCPWS | Contaminant Name | Violation Category | Compliance Status |
|-----------|------------------------|------------------|---------------------|------------------------|
| ID | Name | | | - |
| | | | MCL, SINGLE | |
| IL3115469 | CROW VALLEY CAMPGROUND | NITRATE | SAMPLE | Returned to Compliance |
| | HARVEST TIME BIBLE CH- | | MCL, SINGLE | |
| IL3134098 | AUDITOR | NITRATE | SAMPLE | Returned to Compliance |
| IL3001883 | GREENWOOD SCHOOL | ARSENIC | MCL, AVERAGE | Returned to Compliance |
| IL3001883 | GREENWOOD SCHOOL | ARSENIC | MCL, AVERAGE | Returned to Compliance |
| IL3001883 | GREENWOOD SCHOOL | ARSENIC | MCL, AVERAGE | Returned to Compliance |
| IL3001883 | GREENWOOD SCHOOL | ARSENIC | MCL, AVERAGE | Returned to Compliance |
| IL3057844 | OLYMPIA SCHOOL | ARSENIC | MCL, AVERAGE | Returned to Compliance |
| IL3057844 | OLYMPIA SCHOOL | ARSENIC | MCL, AVERAGE | no SOX |
| IL3141184 | CORN BELT ENERGY CORP | ARSENIC | MCL, AVERAGE | no SOX |
| IL3141184 | CORN BELT ENERGY CORP | ARSENIC | MCL, AVERAGE | no SOX |
| IL3141184 | CORN BELT ENERGY CORP | ARSENIC | MCL, AVERAGE | no SOX |
| | | | MCL, E. COLI, POS E | |
| IL3149021 | BP QUICK MART | E. COLI | COLI (RTCR) | no SOX |
| | SANGCHRIS STATE PARK | | MCL, E. COLI, POS E | |
| IL3095927 | HIDDEN POND (95927) | E. COLI | COLI (RTCR) | no SOX |
| | ROOKS CREEK ELEMENTARY | TOTAL HALOACETIC | | |
| IL3005413 | SCHOOL | ACIDS (HAA5) | MCL, AVERAGE | no SOX |
| | | TOTAL HALOACETIC | | |
| IL3057844 | OLYMPIA SCHOOL | ACIDS (HAA5) | MCL, AVERAGE | no SOX |
| | ROOKS CREEK ELEMENTARY | | | |
| IL3005413 | SCHOOL | TTHM | MCL, AVERAGE | no SOX |

Appendix E Community Public Water Supply Facilities Activated Between October 1, 2003 and December 31, 2019

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|---|----------------------------------|----------------|---|--------------|
| IL0015500 | IL VETERANS HOME (QUINCY) | A | 4/12/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0070060 | GREENVIEW ESTATES MHP | A | 9/8//2014 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL0070200 | POPLAR GROVE WELL 7 SERVICE AREA | P | 1/24/2006 | (no permit info available) | |
| IL0070350 | POPLAR GROVE WEST- COUNTRYSIDE | A | 10/1/2004 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL0170010 | CASS RURAL WATER DISTRICT | A | 5/1/2008 | 8/12/2004 | 0 |
| IL0170080 | ARENZVILLE RURAL WATER COOPERATIVE | A | 3/2/2011 | 2/16/2007 | 0 |
| IL0190660 | MAPLEWOOD MAC LLC | A | 3/7/2017 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0195310 | WOODLAND ACRES MHC | A | 11/27/2018 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0195320 | SHADOW WOOD MHP | A | 1/23/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0195350 | ILUR PORTFOLIOS - CARRIAGE ESTATES LLC | A | 1/1/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|---|----------------------------------|----------------|---|--------------|
| IL0195360 | ILUR WOODS EDGE MHP LLC | A | 12/7/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0195370 | ILUR PORTFOLIO 5 - WILSON MHP LLC | A | 12/7/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0195380 | ILUR PORTFOLIO 5 - TRAILSIDE MHP LLC | A | 12/7/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0195390 | ILUR PORTFOLIO 5- SURBANA ESTATES MHP LLC | A | 12/7/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0195400 | ILUR LIBERTY COMMONS MHP LLC | A | 12/7/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0210030 | SHARPSBURG AND NEIGHBORING AREA WATER SY | A | 4/13/2011 | 6/23/2011 | 0 |
| IL0270040 | GATEWAY REGIONAL WATER COMPANY | A | 5/10/2007 | 5/11/2004 | 0 |
| IL0310010 | PARADISE MHP | A | 1/5/2017 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0310200 | WOODS OF SOUTH BARRINGTON | A | 7/26/2007 | 7/29/2005 | 0 |
| IL0310230 | MID-MARK WATER COMMISSION | A | 1/13/2011 | Discovered System- system was active prior to 10/1/1999 | 0 |
| IL0310370 | LINDENTREE TOWNHOMES | A | 12/1/2005 | 10/24/2003 | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|---|----------------------------------|----------------|---|--------------|
| IL0311540 | LA GRANGE ESTATES MHP | A | 7/6/2006 | Discovered System- system was active prior to 10/1/1999 | 0 |
| IL0311900 | OAK LANE MHC | A | 2/02/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0311960 | MORTON GROVE - NILES WATER COMMISSION | A | 1/3/2019 | 11/1/2017 | 0 |
| IL0312020 | NILES NURSING AND REHABILITATION | Ι | 7/3/2019 | formerly exempt - existed prior to 1999 - no SEP required | |
| IL0312050 | AQUA ILLINOIS- SUMMERDALE | A | 11/19/2015 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL0312433 | LARAMIE PARK HOMEOWNER ASSOCIATION | P | 10/1/2004 | status change - system was active (exempt) prior to 10/1/1999 | |
| IL0312540 | GRANDBRIAR OF PROSPECT HEIGHTS | A | 5/23/2017 | 3/4/2016 | 0 |
| IL0312800 | WEATHERSTONE LAKES MHP - SAUK TRAIL, LLC | A | 11/22/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0315125 | ALPINE VILLAGE MHP | A | 1/6/2017 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0315617 | EDWARD HINES JR V A HOSPITAL | A | 5/17/2007 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL0315850 | STERLING ESTATES MHP | A | 7/1/2005 | status change - system was active (exempt) prior to 10/1/1999 | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|--|----------------------------------|----------------|---|--------------|
| IL0317830 | NORTH PARK UNIVERSITY | P | 12/19/2018 | formerly exempt - existed prior to 1999 - no SEP required | |
| IL0350100 | JEWETT | A | 12/1/2003 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL0374860 | SANDWICH ESTATES MHP | A | 8/3/2011 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL0374865 | TRIANGLE MANUFACTURED HOME COMMUNITY | A | 8/18/2011 | Discovered Systemsystem was active prior to 10/1/1999 | 0 |
| IL0375500 | NORTHERN ILLINOIS UNIVERSITY-DEKALB | A | 11/24/2004 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL0495400 | EASY BREEZE MANUFACTURED HOME PARK | A | 5/4/2012 | system existed prior to 10/1/1999 but not regulated until 2012 | 0 |
| IL0510020 | KASKASKIA SPRINGS WTER CO. | P | 4/21/2009 | 4/22/2010 | |
| IL0530260 | PAXTON MHP LLC | A | 12/7/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0570150 | BANNER | P | 2/10/2014 | Permit Denied, No appeal | |
| IL0578020 | BERNADOTTE TOWNSHIP | P | 8/5/2009 | 8/31/2009 | |
| IL0630070 | BURT ESTATES MHC | A | 2/2/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0750910 | SUGAR CREEK MANUFACTURED HOME COMM., LLC | A | 11/15/2006 | Discovered System- system was active prior to 10/1/1999 | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|---|----------------------------------|----------------|---|--------------|
| IL0775410 | WILDWOOD MHP | A | 3/18/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0775160 | CRAB ORCHARD LAKE MHC | A | 9/14/2017 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0810030 | MOORES PRAIRIE TOWNSHIP WATER COMPANY | A | 5/9/2013 | 2/23/2012 | 0 |
| IL0890160 | PINGREE GROVE | A | 10/6/2005 | 8/18/2004 | 0 |
| IL0894400 | WILLOW LAKE ESTATES MHP | A | 7/1/2015 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL0930300 | HIGHGROVE CONSERVATION DEVELOPMENT | P | 6/5/2006 | 5/28/2008 | |
| IL0955300 | HIDE-A-WAY LAKES | A | 7/19/2019 | IEPA became aware of new CWS in 2019 and is working with them on submission of Cap Dev Report | 0 |
| IL0970010 | BEACH MHP | A | 5/03/2018 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0970240 | BLUFF LAKE LODGES, INC. | A | 12/21/2017 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0970255 | HIGHLAND LAKE WATER COMPANY | A | 9/17/2019 | IEPA became aware of new CWS in 2019 and is working with them on submission of Cap Dev Report | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|---|----------------------------------|----------------|---|--------------|
| IL0970330 | ARBORIA OF LONG GROVE SENIOR CARE | A | 7/25/2017 | 3/5/2016 | 0 |
| IL0970340 | LONG GROVE | A | 5/14/2018 | 4/15/2016 | 0 |
| IL0971200 | PRAIRIE TRAILS OF LONG GROVE | A | 2/18/2004 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL0975040 | AQUA ILLINOIS- HAWTHORN WOODS | A | 1/1/2005 | 1/15/2004 | 0 |
| IL0975070 | AQUA ILLINOIS-RAVENNA | A | 8/24/2006 | 7/27/2004 | 0 |
| IL0975090 | SEDGEBROOK INC | P | 6/21/2004 | status change - system was active (exempt) prior to 10/1/1999 | |
| IL0990510 | BELLE AIRE MHP | A | 9/26/2018 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL0990560 | MENDOTA MOBILE HOME COMMUNITY | A | 5/1/2006 | Discovered System- system was active prior to 10/1/1999 | 0 |
| IL0995329 | LA SALLE COUNTY NURSING HOME | A | 8/30/2017 | Went inactive briefly due to tornado – reactivated following repairs | 0 |
| IL0995750 | WEST WALNUT TRAILER COURT | A | 6/9/2011 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL0995840 | SHERIDAN CRCTL CNTR | A | 10/15/2003 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1030350 | SAUK VALLEY STUDENT HOUSING | I | 9/28/2005 | Facility closed – 5/15/2016 | 0 |
| IL1050500 | DANA/LONG POINT, READING, ANCONA RWD | I | 1/04/2016 | Purchased by IAWC – Streator – 6/1/2009 | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|--|----------------------------------|----------------|---|--------------|
| IL1050650 | IL AMERICAN-SAUNEMIN | A | 9/1/2004 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1055040 | ILPO REDWOOD MHP LLC | A | 1/25/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1090020 | SCIOTA | A | 11/1/2003 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1090030 | WEST PRAIRIE WATER CO- OP | A | 8/22/2007 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1090380 | KILJORDAN MEADOWS | A | 10/01/2018 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1110070 | SPRING GROVE | P | 9/23/2005 | 11/15/2005 | |
| IL1110130 | WOODS CREEK WATER SUPPLY | I | 11/30/2005 | 7/22/2003 | 0 |
| IL1110930 | MEADOWS OF WEST BAY WATER TREATMENT | I | 10/19/2007 | 9/15/2005 | 0 |
| IL1130210 | BLM GW MHP, LLC | A | 3/7/2017 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1135130 | WILLOW CREEK NORTH MHP | A | 8/23/2006 | Discovered System- system was active prior to 10/1/1999 | 0 |
| IL1150020 | BOODY COMMUNITY WATER COMPANY | A | 10/23/2006 | 8/24/2005 | 0 |
| IL1170060 | SOUTH PALMYRA WATER COMMISSION | A | 12/19/2003 | status change - system was active (exempt) prior to 10/1/1999 | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|-------------------------------------|----------------------------------|----------------|---|--------------|
| IL1190260 | UNIVERSITY FLATS MHP | A | 3/23/2017 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1190400 | EAST 30 MHP | A | 11/21/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1195160 | ENCHANTED VILLAGE | A | 6/15/2015 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1195180 | OAK GROVE MHP - MADISON COUNTY | A | 12/6/2016 | formerly exempt - existed prior to 1999 - no SEP required | |
| IL1195350 | VILLAGE GREEN MHP | A | 7/17/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1235125 | AUTUMN RIDGE ESTATES | A | 3/29/2007 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1270200 | GALLAGHER SUBDIVISION | P | 6/19/2012 | not active | |
| IL1375050 | NORTH MORGAN WATER COOP | A | 11/1/2007 | 10/14/2005 | 0 |
| IL1430080 | BUFFALO HOLLOW FARMS WATER ASSOC | A | 9/7/2004 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1590200 | OLNEY | A | 4/3/2008 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1590220 | ACORN ACRES MHP | A | 7/01/2018 | formerly exempt - existed prior to 1999 - no SEP required | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|---|----------------------------------|----------------|---|--------------|
| IL1610350 | MISSISSIPPI MANUFACTURED HOME COMMUNITY | A | 5/29/2014 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1610410 | HIGH CLIFF ESTATES | A | 5/03/2018 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1615540 | TENNANTS SHADY OAKS SUBDIVISION | A | 10/1/2012 | system existed prior to 10/1/1999 but not regulated until 2012 | 0 |
| IL1630070 | CONCORDIA WATER COOPERATIVE | P | 12/20/2011 | 2/3/2012 | 0 |
| IL1635080 | ILDU LEPERE MHP, LLC | A | 12/3/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1670060 | OAKWOOD ESTATES | A | 8/20/2014 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1670070 | GRAND VALLEY VILLAGE MHP | A | 09/01/2018 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1670080 | SOUTH SANGAMON WATER COMMISSION | A | 5/10/2012 | 12/23/2010 | 0 |
| IL1670090 | ROUND PRAIRIE WATER COOP | A | 10/8/2013 | 7/28/2011 | 0 |
| IL1670100 | WOODSIDE MHC | I | 1/22/2013 | status change - system returned to exempt 6/24/2015 | 0 |
| IL1670110 | PARK RIDGE MHC | A | 1/22/2013 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1670120 | BISSELL VILLAGE MHC | A | 2/11/2013 | 1/11/2013 | 0 |
| IL1670130 | NORTHBROOK MHC | A | 2/11/2013 | 1/11/2013 | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|--------------------------------------|----------------------------------|----------------|---|--------------|
| IL1670140 | EDGEWOOD MOBILE HOME COURT (MHC) | A | 6/28/2013 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1670160 | RIDGE VILLAGE MHP | A | 9/24/2013 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1670170 | MILTON MANOR MHP | A | 4/30/2014 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1670180 | LINDEN MANOR MHP | A | 4/30/2014 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1670190 | WESTWOOD | A | 10/10/2014 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1670210 | WESTWOOD PLACE | A | 10/10/2014 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1670220 | GASLITE COURT MHC | A | 9/17/2015 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1670230 | EJ WATER - SANGCHRIS SERVICE AREA | A | 1/10/2017 | 4/27/2016 | 0 |
| IL1670240 | DEERWOOD ESTATES | A | 9/29/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1670250 | PHEASANT RUN MHP | A | 6/20/2018 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1675185 | WOODLAND ACRES MHP | A | 1/4/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|---|----------------------------------|----------------|---|--------------|
| IL1690020 | DHS RUSHVILLE TREATMENT AND DETENTION | A | 8/31/2009 | status change - system was active (exempt) prior to 10/1/1999 | 0 |
| IL1710020 | SCOTT COUNTY RURAL WATER CO-OP | A | 7/24/2008 | 6/10/2002 | 0 |
| IL1790520 | ILMO OAK LAWN MHP LLC | A | 1/30/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1970130 | GODLEY PUBLIC WATER DISTRICT | A | 5/5/2004 | 8/26/2011 | 0 |
| IL1975030 | AQUA ILLINOIS - UNIVERSITY PARK | A | 6/18/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1975140 | BONNIE BRAE FOREST MANOR SNDST | A | 4/26/2018 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1975225 | IMPERIAL MHC | A | 2/2/2016 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1977070 | LOCKPORT HEIGHTS SD | A | 5/09/2018 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL1990120 | THE ORCHARDS MHC | A | 3/29/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL2010030 | FOREST VIEW MHP | A | 6/1/2005 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL2010080 | AQUA ILLINOIS- SHERIDAN GROVE | A | 5/4/2005 | 9/19/2007 | 0 |

| Facility Number | Facility Name | Status A=Active P=Proposed | Status Date | Capacity Demonstration Notes/ Approval Date | ETT Score |
|--------------------|---------------------|----------------------------------|----------------|---|--------------|
| IL2010460 | SOUTH BLUFF MHP | A | 7/15/2015 | formerly exempt - existed prior to 1999 - no SEP required | 0 |
| IL2035050 | TUCKAWAY PEORIA LLC | A | 6/19/2019 | formerly exempt - existed prior to 1999 - no SEP required | 0 |

Appendix F
Non-Transient Non-Community Water Supplies
Activated between January 1, 2004 and December 31, 2019

| Facility # | Facility Name | Facility Status A=Active I=Inactive | Activation Date | ETT Score |
|------------|---|-------------------------------------|--------------------|-----------|
| IL3147652 | Cornerstone Christian Academy | A | 2-24-04 | 42 |
| IL3147660 | Springhaven Park | I | 3-1-04 | |
| II3147728 | American Precision Electronics | A | 3-10-04 | |
| IL3147801 | All State West Plaza | A | 3-25-04 | |
| IL3147900 | Barbara Rose Elementary School | A | 6-10-04 | |
| IL3148270 | Ag View FS Inc. | A | 10-14-05 | 2 |
| IL3148361 | Will County Forest Preserve Op & Maint. | I | 10-18-04 | |
| IL3148430 | Rankin School Dist | A | 9-7-04 | |
| IL3148619 | North Boone High School (09-27-04) | A | 1-4-05 | |
| IL3148742 | Barrington Methodist Church | A | 3-29-05 | |
| IL3149005 | TOYAL AMERICA | A | 3-15-05 | |
| IL3149039 | Monsanto Agronomy Center | A | 6-6-05 | |
| IL3149088 | QTC Development, Inc | A | 6-7-05 | 1 |
| IL3149252 | Countryside Private School | A | 10-3-05 | 4 |
| IL3149427 | Mobil Truck Stop | A | 10-4-05 | |
| IL3149443 | Wilton Federated Church | A – Changed to Transient System | 10-4-05 | |
| IL3149559 | Citgo Refinery North Well | A | 8-2-06 | |
| IL3149591 | Plainfield Township | A – Changed to Transient System | 1-23-06 | |
| IL3149807 | Flower Garden Toddler Center | I | 2-1-06 | |
| IL3149849 | Walco Tool and Engineering | A – Changed to Transient System | 2-15-06 | |
| IL3150052 | Toolamation | A | 4-21-06 | |
| IL3150102 | Forming America Ltd. | A | 4-25-06 | |
| IL3150169 | Merichkas | A | 5-11-06 | |
| IL3150433 | Crest Foods Production | A | 11-2-06 | |
| IL3150441 | Crest Foods Warehouse | A | 11-2-06 | |
| IL3150548 | Monsanto Seeds | A | 11-2-06 | |

| Facility # | Facility Name | Facility Status A=Active I=Inactive | Activation Date | ETT Score |
|------------|-------------------------------------|-------------------------------------|--------------------|-----------|
| II3150581 | Victory Christian Center | A-Changed to | 1-24-07 | |
| | - | Transient System | | |
| IL3150748 | Seward Screw Products 16377 | A | 3-7-07 | |
| IL3150763 | Illinois Crime Lab | I | 3-7-07 | |
| IL3139337 | Superior Felt | I | 8-13-07 | |
| IL3151654 | Monsanto Corn Research | A | 1-9-08 | |
| IL3151670 | Pioneer Hi-Bred Intl. Corn Research | A | 3-4-08 | |
| IL3151944 | Freemont Intermediate School | A | 4-2-08 | |
| IL3152173 | Sav A Pet | A | 5-14-08 | 3 |
| IL3152223 | Apachi Day Camp | A-Changed to Transient System | 5-1-08 | |
| IL3152462 | Danisco | A | 10-1-08 | |
| IL3152504 | Monsanto Office | A | 10-1-08 | |
| IL3152629 | Patriot Renewable Fuels | A | 12-17-08 | |
| IL3152645 | Monsanto Barn | A | 5-8-08 | |
| IL3152744 | Mary Sears Child Care | I | 11-13-14 | |
| IL3152835 | West Hills Shopping Center | A | 9-18-08 | |
| IL3152850 | Deans Food Company | A | 12-29-08 | |
| IL3153015 | Chemtool Rockton | A | 3-12-09 | |
| IL3153023 | Pentecostal Center | I | 12-17-08 | |
| IL3153064 | Menards | A | 2-3-09 | |
| IL3153072 | Jewel Wells Spring Grove | A | 3-31-09 | |
| IL3153080 | Pioneer Hi-bred Int. | A | 3-31-09 | |
| IL3153213 | Little Bit Country Preschool | A – Changed to Transient System | 6-25-09 | |
| IL3153239 | ROSENBERG CAR DEALERSHIP | A | 3-30-15 | |
| IL3153288 | Cross Roads Community Church | A – Changed to Transient System | 6-25-09 | |
| IL3153346 | Scott Company Hyponex | A | 6-25-09 | |
| IL3153411 | Vermilion Power Station | Ι | 9-17-09 | |
| IL3153569 | Rovanco Piping System Inc. | A | 9-25-09 | |
| IL3153890 | Curry Ice & Coal | Ι | 12-30-09 | |
| IL3153924 | Hanson Pressure Pipe West Well | I | 6-3-09 | |
| IL3154047 | Full Fill Industries | A | 2-16-10 | |

| Facility # | Facility Name | Facility Status A=Active I=Inactive | Activation Date | ETT Score |
|------------|---|-------------------------------------|--------------------|-----------|
| IL3154153 | CORNERSTONE EARLY LEARNING | I | 1-25-10 | |
| IL3154161 | HELMAR LUTHERAN CHURCH | A – Changed to Transient System | 3-20-12 | |
| IL3154476 | Open Bible Church | I | 3-30-10 | |
| IL3154724 | Lifes Little Miracles | A | 4-13-10 | |
| IL3154567 | Moore Tires Inc. | A | 4-26-10 | |
| IL3154633 | Lutheran General Hospital | A | 6-24-10 | 1 |
| IL3154666 | Monroe Center School 2 nd Well | A | 6-24-10 | 4 |
| IL3155028 | MASJID AL HUDA SCHOOL | I | 6-20-17 | |
| IL3155085 | We Care Daycare | A | 1-3-11 | 5 |
| IL3147736 | Flower Garden Day Care 3 rd Building | A | 2-9-11 | |
| IL3148429 | MONTESSORI ACADEMY GLEN ELLYN | A | 2-10-11 | |
| IL3151365 | Children of Promise | A | 2-10-10 | 4 |
| IL3155382 | SEPTRAN INC | A | 2-24-11 | |
| IL3155168 | SAUBER MFG CO 11 BAY | Ι | 3-15-11 | |
| IL3155150 | SAUBER MFG CO SUPER SHOP | A | 3-15-11 | |
| IL3155390 | PEACEFUL PATHWAYS | A | 4-3-11 | |
| IL3155416 | FOX METRO WATER RECLAMATION DISTRICT | A | 4-19-11 | |
| IL3155358 | SUNSET FOODS VILLAGE OF LONG GROVE | A | 5-17-11 | |
| IL3155291 | H B FULLER | A | 5-26-11 | 5 |
| IL3155309 | NORTHSHORE UNIVERSITY HEALTH SYSTEM | A | 6-28-11 | |
| IL3155606 | UIC MEDICAL CENTER CHICAGO | A | 8-31-11 | 1 |
| IL3155614 | HEARTLAND PRIVATE SCHOOL | A | 9-21-11 | 1 |
| IL3155747 | NORTHFIELD BLOCK COMPANY 1 | A | 9-29-11 | |
| IL3155754 | NORTHFIELD BLOCK COMPANY 2 | A | 9-29-11 | |
| IL3155762 | NORTHFIELD BLOCK COMPANY 3 | A | 09-29-11 | |
| IL3155796 | AMERICAN AD BAG | A | 10-12-11 | |

| Facility # | Facility Name | Facility Status A=Active I=Inactive | Activation Date | ETT Score |
|------------|-----------------------------------|-------------------------------------|--------------------|-----------|
| IL3155804 | MARION JOY REHAB HOSPITAL | A | 01-10-12 | 8 |
| IL3155952 | CHRIST COMMUNITY CHURCH | A | 01-10-12 | |
| IL3155986 | KOLB-LENA CHEESE COMPANY | A | 01-10-12 | 6 |
| IL3156323 | TRINITY COMMONS | A – Changed to Transient System | 04-02-12 | |
| IL3156471 | PCS PHOSPHATE | A | 06-26-12 | 4 |
| IL3156554 | QUENTIN ROAD BIBLE BAPTIST SCHOOL | A | 07-17-12 | |
| IL3156646 | WONDERS OF CHILDREN DAYCARE | A | 08-02-12 | |
| IL3156695 | NACHUSA LUTHERAN HOME | A | 09-13-12 | |
| IL3156737 | ILLINOIS MARINE TOWING INC | A | 09-13-12 | |
| IL3156760 | PRECISION PLANTING | A | 09-17-12 | |
| IL3156836 | JW MARRIOTT HOTEL | A | 11-12-12 | |
| IL3156943 | COUNTRYSIDE CENTER HANDICAPPED | A | 12-31-12 | |
| IL3156950 | WHOLE FOODS MARKET WELL | A | 12-31-12 | |
| IL3157149 | JX PETERBUILT | A | 04-02-13 | |
| IL3157164 | AUX SABLE MORRIS | A | 04-02-13 | |
| IL3157289 | RIVER TERRACE CHURCH | A | 05-13-13 | |
| IL3157297 | BERNER FOOD & BEV | A | 05-15-13 | |
| IL3157347 | PREMIER FABRICATION | A | 06-04-13 | |
| IL3157412 | RINKS HOLDING LLC | A | 07-15-13 | |
| IL3157479 | TUGRANT DIVERSIFIED BRANDS | A | 09-24-13 | |
| IL3157487 | NORTHSHORE UNIVERSITY GLENVIEW | A | 10-2-13 | |
| IL3157586 | TECHNISAND WEDRON | A | 10-9-13 | |
| IL3157594 | WEDRON SILCA 2 | A | 10-9-13 | |
| IL3157636 | MYCOGEN SEEDS GRAND RIDGE | I | 05-03-18 | |
| IL3157677 | NUSSBAUM TRANSPORTATION | A | 10-24-13 | 4 |
| IL3157990 | AZZ GALVANIZING | A | 12-05-13 | |
| IL3157933 | PEARL VALLEY EGGS | A | 12-26-13 | |
| IL3157974 | CITY OF ROCHELLE AIRPORT | A | 12-26-13 | |
| IL3158444 | CANTIGNY PARK | A | 9-3-14 | |
| IL3158519 | NATURE SCHOLARS DAYCARE | A | 9-30-14 | |

| Facility # | Facility Name | Facility Status A=Active I=Inactive | Activation Date | ETT Score |
|------------|-----------------------------------|-------------------------------------|--------------------|-----------|
| IL3158600 | INTEGRYS GAS 2 ND WELL | A | 10-8-14 | |
| IL3158717 | ALLOY SPECIALTIES INC | A | 12-26-14 | |
| IL3158774 | MACLEAN FOGG | A | 1-15-15 | |
| IL3158873 | WEDRON SILICA SCREENING HOUSE | A | 2-17-15 | |
| IL3158881 | WEDRON SILICA MINE SITE | A | 2-17-15 | |
| IL3158923 | KSI CONVEYORS INC | A | 3-4-15 | |
| IL3158774 | MACLEAN FOGG M1 | A | 01/15/2015 | |
| IL3158873 | WEDRON SILICA SCREEN HOUSE | A | 2-17-15 | |
| IL3158881 | WEDRON SILICA MINE SITE | A | 2-17-15 | |
| IL3158923 | KSI CONVEYORS INC | A | 3-3-15 | |
| IL3158956 | J M HUBER WELL 1 | A | 4-9-15 | |
| IL3159053 | FAITH CHRISTIAN ELEM SCHOOL | A | 4-9-15 | |
| IL3159061 | CELANESE | A –Changed to Transient | 4-9-15 | |
| IL3159418 | PRIMROSE SCHOOL/DAYCARE | A | 6-17-15 | |
| IL3159459 | J M HUBER WELL 2 | A | 6-30-15 | |
| IL3159582 | DURA BAR METAL SERVICES | A | 8-25-15 | |
| IL3159780 | Winnebago Co. Rock 59 | A | 1-14-16 | 1 |
| IL3159806 | SWENSON SPREADER LLC | A | 1-14-16 | |
| IL3159889 | ARNTZEN CORPORATION | A | 2-18-16 | 1 |
| IL3159897 | DUPONT PIONEER | A | 3-08-16 | |
| IL3161240 | Capt. James A Lovell FHCC | A | 11-14-17 | |

Appendix G:

| Rules | Illinois Implementation Status | U.S. EPA Primacy Revision Application or Program Update | | U.S. EPA Status Explanation | U.S. EPA Timelines and Milestones |
|--|-----------------------------------|---|-----------|-----------------------------|--|
| | | Status | Date | | |
| Phase II/V Contaminants | Implemented | Approved | 9/12/1994 | | |
| Total Coliform | Implemented | Approved | 6/7/1993 | | |
| Lead and Copper | Implemented | Approved | 9/12/1994 | | |
| New PWS Definition | Implemented | Approved | 7/29/2013 | | |
| Administrative Penalty Authority | Implemented | Approved | 8/1/1998 | | |
| Consumer Confidence Report | Implemented | Extension | 9/1/2007 | R5 primacy backlog | R5 will add the date we received this application. |
| Operator Certification Program | Implemented | Approved | 2/1/2001 | | |
| Interim Enhanced Surface Water Treatment | Implemented | Received | 1/15/2009 | R5 primacy backlog | Working to approve in FY17. |
| Stage 1 Disinfection Byproducts | Implemented | Received | 1/15/2009 | R5 primacy backlog | |
| Lead and Copper Minor Revisions Rule | Implemented | Received | 1/15/2009 | R5 primacy backlog | |
| Public Notice | Implemented | Received | 9/28/2010 | R5 primacy backlog | |
| Radionuclides | Implemented | Adopted | 10/1/2001 | R5 primacy backlog | Working to approve in FY17. R5 will add the date we received this application. |
| Arsenic | Implemented | Approved | 7/29/2013 | | in the second se |
| Filter Backwash | Implemented | Received | 1/15/2009 | R5 primacy backlog | |
| Long Term 1 Enhanced Surface Water Treatment | Implemented | Received | 1/15/2009 | R5 primacy backlog | |
| Variance and Exemption | Implemented | Extension | 9/1/2007 | R5 primacy backlog | R5 will add the date we received this application. |
| Stage 2 Disinfection Byproducts | Implemented | Approved | 3/16/2012 | | |
| Long Term 2 Enhanced Surface Water Treatment | Implemented | Approved | 3/16/2012 | | |

| Ground Water Rule | Implemented | Approved | 7/29/2013 | | |
|----------------------------|-----------------------|----------|------------|-------------------------------------|-----------------------|
| Lead and Copper Rule Short | Implemented | Received | 10/13/2010 | R5 primacy backlog | Working to approve in |
| Term Revisions | | | | | FY17. |
| Revised Total Coliform | CWS Implemented, Non- | Received | 3/20/2014 | Working to resolve issues regarding | Working to approve in |
| | CWS Partial | | | NCWS implementation in | FY17/18. |
| | Implementation | | | order to have an approvable | |
| | | | | package. | |

Appendix H Table of FY20 Regional/State Measures

| Description | Name and | Target |
|--|-------------------------------|----------------------------------|
| | update schedule | |
| # of ETT priority systems to be addressed | OECA Measure: | FY20: # of ETT priority |
| | | systems |
| Percent of CWSs and population served by | SDW-2.1.1 | FY20: |
| CWSs that meet all applicable health-based | | % CWS Systems |
| drinking water standards | | FY20: % population served |
| - | | by CWS Systems |
| Percent of CWS and NCWS with san. survey | R5 - Updated by Region 5 in | FY20: |
| w/in the past 3 or 5 yrs as required. | April and October | % CWS |
| | | % NCWS |
| Percent of CWS where risk to public health | R5 SWP Program measure | FY20: |
| is minimized through source water protection | | % CWS Systems |
| (SDW-SP4a) | | |
| Percent of population served by CWS where | R5 SWP Program measure | FY20: % population served |
| risk to public health is minimized through | | by CWS Systems |
| source water protection (SDW-SP4b) | | |
| All Rule Violation Completeness Reporting | R5 High Priority: | FY20: |
| | Updated quarterly by Region 5 | % of rules |
| 1. Percent of <u>CWS systems</u> meeting all | Shared Goals: Updated | CY19: ≥95% |
| health-based standards | annually in April by Region 5 | |
| 2. Percent of <u>population</u> of CWS_meeting all | Shared Goals: Updated | CY19: ≥95% |
| health-based standards | annually in April by Region 5 | |
| 3. Percent of <u>NTNCWSs</u> meeting all health- | Shared Goals: Updated | CY19: ≥95% |
| based standards | annually in April by Region 5 | |
| 4. Percent of <u>TNCWSs</u> meeting all health- | Shared Goals: Updated | CY19: ≥95% |
| based standards | annually in April by Region 5 | |
| 5. Percent of population served by CWSs | Shared Goals: Updated | CY19: <5% |
| with significant /major monitoring violations | annually in April by Region 5 | |
| 6. Percent of <u>CWS systems</u> with <u>significant</u> | Shared Goals: Updated | CY19: <10% |
| /major monitoring violations (includes LCR | annually in April by Region 5 | |
| Type 66 violations) | | |
| 7. Percent of <u>NTNCWSs</u> with | Shared Goals: Updated | CY19: <5% |
| significant/major monitoring violations for | annually in April by Region 5 | |
| acute health risks | | |
| 8. Percent of <u>NTNCWSs</u> with | Shared Goals: Updated | CY19: <10% |
| significant/major monitoring violations for | annually in April by Region 5 | |
| <u>chronic</u> health risks | | |
| 9. Percent of <u>TNCWSs</u> with | Shared Goals: Updated | CY19: <10% |
| significant/major monitoring violations | annually in April by Region 5 | |